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GAVIN NEWSOM, MAYOR
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SAN FRANCISCO BICYCLE PLAN: NETWORK IMPROVEMENT DOCUMENT

Catergory: C.iv.b Bicycle Circulation/Safety

PROPOSITION K
5-YEAR PRIORITIZATION PROGRAM

DRAFT JANUARY 2005

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Prepared for the
San Francisco County Transportation Authority

Prepared by the
Department of Parking and Traffic
Traffic Engineering Division

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1.0 Introduction

In November 2003, San Francisco voters approved Prop K, reauthorizing the ½ cent sales tax for transportation improvements and approving a new 30-year Expenditure Plan. The Expenditure Plan determines eligibility for Prop K funds through a list of specific projects (e.g. Central Subway) and programs (e.g. pedestrian circulation/safety and signals and signs). It also sets caps for the maximum amount of Prop K funds that will be available for specific projects and programs over the next 30 years, totaling an estimated $2.82 billion. In order to fully fund the projects and programs, the Expenditure Plan assumes that the Prop K dollars will leverage (or match) another $9.6 billion in other federal, state, regional, and local funds. Some of those leveraged funds will be available to San Francisco through funding allocation formulas. The City will have to compete for non-formula (discretionary) funds.

The Expenditure Plan includes a number of requirements, including the development of 5-Year Prioritization Programs as a condition for receiving allocations in each programmatic (i.e., not project-specific) category in the Expenditure Plan. This requirement applies to about 20 programs such as street resurfacing, new signals and signs, traffic calming, and transit enhancements.

The Prioritization Programs are intended to provide a stronger link between project selection and expected project performance, and to support on-time, on-budget project delivery, and timely and competitive use of state and federal matching funds. Specifically, the purpose of the Prioritization Programs is to:

- Establish a clear set of criteria for prioritizing projects,
- Improve agency coordination at the earlier stages of the planning process,
- Allow and ensure public input early and through the planning process, and
- Establish performance measures.

The ideal outcome of the Prioritization Programs is the establishment of a strong pipeline of grant-ready transportation projects that can be advanced as soon as funds (including Prop K, federal, state, and other funds) are available so that the Expenditure Plan can be delivered in a timely and cost effective manner.

Process for Developing Prioritization Programs

This first round of Prioritization Programs covers the five-year period from FY 2004/05 through FY 2008/09. The Prioritization Programs will be updated every three years, in concert with triennial updates of the Prop K Strategic Plan. The Prop K Strategic Plan is the financial tool that guides the timing of allocation of Prop K revenues. The Strategic Plan also

sets policy and provides guidance for the administration of the program, ensuring prudent stewardship of the funds. Finding a balance between the availability of funds and project delivery is an iterative process that requires both examining policy and a functional analysis of department capabilities and fund leveraging opportunities.

The Expenditure Plan established limits on funding and described the types of projects that are eligible for each of the 20 programmatic categories, but did not detail specific projects for funding within each category. While the Strategic Plan provides the long-term road map for managing Prop K revenue, the 5-Year Prioritization Programs ensure that the Authority Board, project sponsors, and the public have a clear understanding of how projects are prioritized for funding within each particular programmatic category.

In cases where a particular programmatic category has multiple potential projects sponsors, the Authority Board designated a lead agency to coordinate the development of the Prioritization Program. The lead agency role is one of facilitator and coordinator, not a veto role.

C. STREETS AND TRAFFIC SAFETY
iii. SYSTEM MAINTENANCE AND RENOVATION
c. Pedestrian and Bicycle Facility Maintenance
Public sidewalk repair and reconstruction citywide. Additional pedestrian facility improvements including stairways, retaining walls, guardrails and rockfall barriers. Upgrades of substandard bicycle lanes; rehabilitation of bicycle paths, and reconstruction of MUNI passenger boarding islands. Includes project development and capital costs. Sponsoring Agencies: DPT, DPW, MUNI. The first $17.4M is Priority 1 and the remainder is Priority 2. Total Funding: $36.8M; Prop K: $19.1M.

iv. BICYCLE AND PEDESTRIAN IMPROVEMENTS
a. Traffic Calming
Programmatic improvements to neighborhood streets to make them more livable and safe to use for all users – pedestrians, cyclists, transit, and autos. Includes strategies to reduce auto traffic speeds and improve pedestrian and bicyclist safety and circulation such as: improvements to bicycle and walking routes (e.g. sidewalk widening, streetscape upgrades including
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Page 16 of 21 landscaping), speed humps, corner bulb-outs, chicanes and channelization (Priority 1). New or improved pedestrian safety measures such as ladder crosswalks and pedestrian signals (Priority 1). Development of neighborhood and school area safety plans

citywide, including abovementioned strategies and complementary outreach and education programs (Priority 1). New traffic circles, signals and signage including flashing beacons and vehicle speed radar signs (Priority 2). The first $60.8M is Priority 1. The next $7.2M is Priority 2 and the remainder is Priority 3. Includes planning, project development and capital costs. Sponsoring Agencies: DPT, DPW. Total Funding: $142.0M; Prop K: $70.0M.

b. Bicycle Circulation/Safety Programmatic improvements to the transportation system to enhance its usability and safety for bicycles. Infrastructure improvements on the citywide bicycle network, such as new bike lanes and paths. Bicycle parking facilities such as bike racks and lockers. Support for bicycle outreach and education programs. Improvements must be consistent with the city's bicycle plan. The first $27.6M is Priority 1. The next $2.4M is Priority 2 and the remainder is Priority 3. Includes project development and capital costs. Sponsoring Agencies: DPT, DPW, BART, PCJPB. Total Funding: $77.6; Prop K: $56.0M. $33.6M; Prop K: $20.0M.

THE BICYCLE PLAN: POLICY FRAMEWORK AND NETWORK IMPROVEMENT DOCUMENT

There are two major parts to the Bicycle Plan: the Policy Framework and the Network Improvement Document..

POLICY FRAMEWORK

The Policy Framework provides an overview of the policies and components of a successful bicycle program including education, outreach, enforcement and bicycle parking. The goals and objectives (listed in the Executive Summary) for the Policy Framework are based on the goals and objectives in the 1997 San Francisco Bicycle Plan. These updated goals and objectives reflect the City's commitment to improving the quality of life of its residents and expanding the role and importance of bicycle transportation in the City of San Francisco. The goals and objectives were developed and refined based on comments from City staff from numerous departments, the San Francisco Bicycle Coalition (SFBC), the Bicycle Advisory Committee (BAC) and the public. Chapter 2 of the San Francisco Bicycle Plan: Policy Framework outlined the potential projects that will be further developed in the Network Improvement Document.

For more information regarding the Policy Framework, please refer to www.bicycle.sfgov.org

NETWORK IMPROVEMENT

Building on the "Network Blueprint" outlined in Chapter 2 of the Policy Framework, the Network Improvement Document lists " the gaps" of the Bicycle Route Network that have been identified by the public and San Francisco agencies through an involved public process. The Network Improvement Document provides a narrative of the entire Bicycle Route Network; identifies potential improvements; lists generalized opportunities and constraints; lists planning level cost estimates; and provides a prioritization process of when Bicycle Route suggestions should be explored. This document examines issues that need to be resolved prior to project funding, such as the need for demonstrated public support or mitigation of impacts as identified through the environmental review process.

APPROVAL, IMPLEMENTATION, AND INCORPORATION WITHIN THE BICYCLE ROUTE NETWORK

Once the Network Improvement Document is completed, it will be presented to the Municipal Transportation Agency (MTA) Board for approval. The projects identified in the Network Improvement Document will still require environmental review and approval by the BOS prior to implementation. Please refer to the Generalized Steps for Bicycle Facility Implementation found within the Policy Framework, Chapter 2, or on the web at www.bicycle.sfgov.org

The Network Improvement Document should be periodically updated to reflect current changes in funding or Bicycle Route Network priorities. Additionally, periodic updates to the Planning Commission should be undertaken to ensure that the Bicycle Route Network referenced within the Policy Framework, and incorporated in the San Francisco General Plan is up-to-date and accurate.

2.0 PUBLIC OUTREACH

One of the purposes of this 5-Year Prioritization Program is to offer an early opportunity for the public to provide meaningful input regarding the projects that will be funded by Proposition K programmatic categories in the next 5 years. The first public meeting on the overall Bicycle Plan Update was held in February 2003. It kicked off a series of public meetings during the Spring of 2003 that discussed the overall Plan, but focused on potential network improvements and the Supplemental Design Guidelines. (The Supplemental Design Guidelines can be found in the appendix of the San Francisco Bicycle Plan: Policy Framework). These meetings were cosponsored by the SFBC, whose participation was funded by a Caltrans community planning grant focused on public outreach for potential network improvements.

By early 2004, the SFBC began outreach to hundreds of individual community groups, seeking input and comments on the "top priority project" concepts[1] that were developed by the consultants. The SFBC then held five highly advertised citywide meetings through the spring of 2004, again focusing on network improvements that were developed by the consultants.

This process involved a high level of public participation. The SFBC's extensive public outreach resulted in:

- A series of citywide and neighborhood-specific workshops to solicit suggestions for improving the Bicycle Route Network;
- Surveys designed to solicit City residents' input on potential Bicycle Route Network improvements, network maintenance needs, bicycle parking needs, and policy and program needs;
- Follow up workshops to present proposed network improvements to the
- neighborhoods; and
- Extensive citywide outreach on specific project proposals to solicit input from merchants, neighborhood groups, and generally interested citizens.

This process involved about 5,000 comments resulting in over 2,800 specific street improvement suggestions, and nearly 2,000 comments related to bicycle policy improvements in San Francisco. The SFBC outreach efforts and summaries can be found in Appendix 9b.

[1] Summaries of the SFBC's work and the Consultant's work can be found in the Appendix of this document.

The Authority hosted two public workshops to seek input on the 5-Year Prioritization Programs, one in November 2004 and one in February 2005
In addition, DPT Bicycle Program will present this prioritization program to the Bicycle Advisory Committee (BAC) and its oversight commission, the Municipal Transportation Agency (MTA) Board.

3.0 PRIORITIZATION CRITERIA

The Prop K Expenditure Plan requires that the 5-Year Prioritization Programs include a prioritization mechanism to rank projects within the program. The intent of this requirement is to provide the Authority Board, the public, and Prop K project sponsors with a clear understanding of how projects are prioritized for funding within a particular programmatic category. Having a transparent and well-documented prioritization methodology in place allows for an open, inclusive and predictable project development process, that will hopefully result in a steady stream of projects that are ready to compete for Prop K and other implementation funding. It also offers an opportunity to take advantage of coordination opportunities with other transportation projects funded by Prop K, and with other funding sources that should result in efficiencies and minimize disruption caused by construction activities.

Public input from the first series of public meetings mentioned above was utilized to generate a list of potential Bicycle Route Network improvements. This list was combined with other existing project lists (remaining recommendations from the 1997 Plan, projects previously recommended by bicycle advocates or members of the public, and improvements recommended through DPT staff analysis). By mid-summer 2003, a prioritization matrix (Table 3.1) was created and applied to rank this combined recommended project list.

These were ranked by members of a Technical Advisory Committee (Table 3.2) which then:

- assembled all individual project rankings and averaged them per project;
- selected the top 50 ranked projects,
- mapped the top 50 projects using GIS,
- grouped projects by corridor and geographic area, and
- adjusted for regional equinity and came to an agreement among TAC members of approximately 20 potential projects that a consultant team would further develop.

TABLE 3.1 Prioritization Ranking Criteria

San Francisco Bike Projects - Ranking Criteria
June 3, 2003 Version

Disclaimer Note: these draft rankings ere not meant as en absolute ranking, rather es an indication of their relative importance only. The goal will be to develop three tiers of project prioritias so that the City may apportion available funding to the highest priority projects. Medium and long-term projects should also be considered important. In fact, some medium and long-tarm projects may ba implamanted es part of a development or public works project. The rankad lists should be considered a "living documant" end should be frequently reviewed to ensure they reflect current San Francisco priorities.

Project scores should be based on the information obtained from site visits and field work, City staff, and from the public

Ranking Criteria	Point Range	Max points	
Land Use	0 to 10	10	A project that provides or promotes connections or access to multiple land uses (e.g. primary generators such as dense residential neighborhoods with high numbers of bicycle commuters with areas of dense employment) will rank favorably according to the land use criteria. Facilities that provide intra- or inter-neighborhood access for shopping trips, access to transit, access to public open space/parks would also rank favorably according to the land use criteria. Longer corridor projects that 'connect' more land uses will tend to rank higher as they are assigned greater points over shorter projects that do
Current Bicyclist Demand	0 to 10	10	Higher points for those projects that currently have significant usage, based on land uses, population, corridor aesthetics, etc. Justification for this criteria is that corridors or spot locations currently receiving high demand may or may not be optimally designed and additional improvement would benefit a large number of existing
Latent Bicyclist Demand	0 to 10	10	Higher points for those projects likely to generate significant usage, based on land uses, population, corridor aesthetics, etc. If safety or functionality is improved, even high use facilities may increase in use levels.
Regional Equality	0 to 5	5	Higher points for areas without a bikeway project within last 5 years, areas that are poorly served by transportation options, areas with higher concentration of economically-disadvantaged residents
Technical ease of Implementation	0 to 10	10	Fewer points for large engineering structures, difficult intersections, etc. Because we may not know the specifics of the projects until it is designed, this number may be adjusted to reflect changed assumptions regarding the preferred engineering solution for the project. Technical ease of implementation focuses on the actual engineering challenges of a project, emphasizing the point that typical physical requirements of San Francisco bicycle projects such as parking removal, traffic lane removal, or lane restriping are not technically challenging from an engineering perspective. Physical solutions are often readily apparent but may require development of political support, addressed under "Political Ease of Implementation," or that specific operational issues be addressed specifically to demonstrate that no negative impacts will occur to other modes, addressed under "Multi-Modal." This criteria addressed specifically the technical, physical aspects of the engineering solution.
Political ease of Implementation	0 to 10	10	Maximum points are assigned for an easy, popular project. If significant neighborhood opposition is a known factor, if support of local elected official is not anticipated, or if other political opposition to a particular aspect of the assumed engineering solution is anticipated then the project receives fewer points under this criteria. NOTE: Projects that are supported by current or adopted planning efforts by Federal, State, regional or local agencies should receive points under this criteria. In addition, projects that are supported by existing or anticipated funding should receive points under this criteria.
Overcomes Barrier/Connectivity	0 to 15	15	Maximum points should be assigned to recommended facilities that would address a major safety concern for bicyclists using bridges, interchanges, and other environments difficult for bicyclists to navigate. Higher points should be assigned to roadways with high speed, high traffic volume, wide road width, difficult intersections or other obstacles to bicycle travel.
Multi-Modal	-10 to 5	5	Max points for projects that benefit other modes, especially transit and pedestrians. Up to -10 (negative ten) points for project that would harm transit operations. When assessing potential negative impact to transit operations (bus, most specifically) it is necessary to assess potential impacts to lines operating on the specific street in question, as well as adjacent/parallel corridors, in order to capture all potential impacts that may result to lines that operate on multiple streets. NOTE: Benefits to pedestrian circulation/street crossings as a result of narrowing or removing travel lanes/adding bicycle lanes should be considered a multi-modal benefit. To the extent possible at this coarse level of analysis, thought should be given to the following pedestrian safety factors including: crossing distance, crossing visibility, assumed changes to signal timing, etc.
Lack of Parallel Facilities Within 1/4 Mile (1300 ft)	0 to 10	10	Max points for project that has no parallel bikeway within 1000 ft. Five points for a parallel but not ideal bikeway. Zero points if excellent parallel bikeway within 1300 ft.
Public Input	0 to 10	10	The "Total requests" column in the prioritization worksheet is based directly on public input received via the Bicycle Plan Update Neighborhood Public Workshops and surveys. The "Total requests" for each project identified in the public outreach process are based on the following methodology developed by SFBC: (1) Small Group Workshop Priority Lists: 1st priority = 4 points, 2nd priority = 3 points, 3rd priority = 2 points; and, (2) Survey respondent total points per project. For this prioritization exercise, projects are ranked under the "Public Input" criteria as follows: (1) Projects receiving greater than 50 requests receive 5 points; and, (2) Projects receiving fewer than 50 requests are grouped as follows: 49-40Total requests=4 Pts; 39-30 Total requests=3 Pts;
Total Points		**95**	

Table 3.2
Agency Members of the Technical Advisory Committee (TAC)

Association of Bay Area Governments - Bay Trail (ABAG)
Bay Area Air Quality Management District (BAAQMD)
Bay Area Rapid Transit (BART)
Department of Public Works (DPW)
Golden Gate Park Concourse Authority
National Park Service
Planning Department
Police Department
Port of San Francisco
Presidio Trust of San Francisco
Recreation and Park Dept.
Redevelopment Agency
SF Bicycle Advisory Committee (BAC)
SF Bicycle Coalition (SFBC)
SF County Transportation Authority (SFCTA)
SF Department of Parking & Traffic (DPT)
SF Fire Department
SF Municipal Railway (Capital Planning)
SF Municipal Railway (Service Planning)
Treasure Island Development Authority

The top ranking projects were billed the "top priority projects" for the consultant team to work on; and their work on these projects can be found within Appendix 9a. . Subsequent ranked projects were then divided into groups (short, mid term, and long term) dependant on the averaged rank, adjusted for regional equality. These were then compared to the Department of Public Works Paving Schedule, and attempts were made to match fiscal years of project implementation to proposed repaving. Additionally the "short", "mid" and "long" term ranking was applied, respectively placing those projects that were not on the paving schedule into fiscal years 1-2,2-4, and greater than 5 years.

Once placed into a fiscal year group, the fiscal constraints[2] of Proposition K were consulted and a project's placement into a particular fiscal year was adjusted so that the total requests for Proposition K funding did not exceed the allowable debt. An agency prioritization comparison was then undertaken, to further adjust and maximize project delivery through the referencing of other Proposition K projects categories. Table 3.3 reflects this prioritization.

The following tables (3.4, 3.5, and 3.6) are the potential projects that have been identified thought the Bicycle Plan Update process. This Document will further specific recommendations along specific corridors and will prioritize when funding should be sought for specific projects.

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[2] Ideally Proposition K projects will not exceed 1/30 of the total category allotment per fiscal year. Proposition K is a 30 year plan, therefore, 1/30 would equal one fiscal year. If project sponsors are willing to pay for interest and fees against that subcategory's limits, then the 1/30 amount can be exceeded.
She also confirmed that if we spent less than 1/30 last year, we can take the "surplus" and use it in next 5 years, as Manito had suggested. Manito and I are planning to do this.

4.0 PERFORMANCE MEASURES

Prop K requires the establishment of performance measures for each programmatic category in the Expenditure Plan. The intent is to demonstrate the system performance benefits of sales tax projects (e.g. reduced transit travel time) and to use the results to inform future project development, allocation of Prop K funds, and programming and prioritization of other funds by the Authority (e.g. Transportation Fund for Clean Air, state Regional Improvement Program funds). The performance measure data will also be critical to support and justify future sales tax reauthorizations, as well as other efforts to identify new revenue sources for transportation projects.

Specific Project Performance Measures

A. Conceptual Planning Projects

These projects are intended to vet the issues of multiple design concepts to the point where they can be evaluated. The concept that survives this evaluation process, can lead to more detailed engineering designs. The purpose of Conceptual Planning and Design is to deliver projects to a funding agency with a well-defined need and a recommended concept.

Projects that are identified as Conceptual Planning Projects will be measured by the completion of a needs and feasibility report.

B. Corridor Planning Projects

These projects were identified within the San Francisco Bicycle Plan: Policy Framework as requiring additional study at the corridor level. These projects may trigger extensive environmental review and must be addressed in a much broader planning context, due to the complexity of the projects and the involvement and responsibilities of numerous City agencies and other jurisdictions.

Projects that are identified as Corridor Planning Projects will be measured by the completion of an Action Plan, similar to that completed by SFCTA for Market Street.

C. Preliminary Design And Engineering Projects

These projects will refine actual design of bicycle improvements. Sufficient engineering will be undertaken to determine whether the project concept can feasibly evolve into an actual project in light of environmental and community constraints and issues. Environmental review should begin at this step. During this phase, a project concept could be determined as being "fatally flawed" due to further analysis, with less obvious, but critical details coming to light. The project could end here or return to the conceptual planning and design phase.

The Performance measure for this type of project will be a report detailing:

- **Environmental Review**
- **Detailed traffic analysis**

- **Refined Cost Estimates**
- **Striping drawing proposals**
- **New traffic signal timing cards**

D. Design and Engineering Projects

At this stage, the concept has become an actual "facility improvement" and could begin working its way through the San Francisco legislative process. Striping drawings and new traffic signal timing cards are modified based upon the staff analysis, public comment, and environmental review. More refined cost estimates and timelines are generated, including Plans, Specifications, and Estimates (PS&Es)**The Performance Measure for Design and Engineering Projects will be the completion of "before and after" bicycle use counts once the Final Design and Engineering[3] is completed and the facility improvement is implemented.**

Programmatic Performance Measures

The unique nature of bicycle projects and bicycle transportation does not easily lend itself to be solely bases on project specific performance measures. Improvements along one street or corridor may still leave gaps throughout the larger bicycle system. (ie. if bicyclists do not have a place to safely park a bike at the end of their trip, or if they have a safe place to park, but can not bike to their desired destination, then the improvement in itself, does not speak to the overall performance of the bicycle program and system) To account for the overall improvement for bicyclists, a programmatic review should also be undertaken. In addition to the specific measures listed above, an indicator on the overall state of bicycle transportation should also be considered, to assist in achieving the overall goal stated in the Bicycle Plan: Policy Framework, "Make bicycling an integral part of the daily life in San Francisco"

The following are Programmatic Performance Measures that should be carried out every other year

- Overall increase of bicycle facilities
- Overall increase of trips by bicyclists

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3 Final Design and Engineering is when the final edits of a striping drawing, or signal timing are made. Environmental review should have occurred by this point and the legislative process should be complete. Changes to the final design could occur based upon recommendations that come out of the public input in the legislative process. A work order is submitted to DPT Paint or Sign Shops; or DPW Construction. (A Work Order can only be generated for bike lane projects if it has been approved by the BOS through a resolution. The BOS can only pass bike lane legislation if the environmental clearance has occurred on a particular project concept.)

Please refer to the Generalized Steps for Bicycle Facility Implementation found within the Policy Framework, Chapter 2, or on the web at www.bicycle.sfgov.org

- Decrease in bicycle related collisions (five year review)[4]
- Bicyclists Survey (every two years)[5]
- Address Action items within the San Francisco Bicycle Plan: Policy Framework

4 For trends to be adequately reviewed, five year window should be utilized when reviewing collision information. This will

5 A model of this survey should be based on the City of Copenhagen's Bicycle Account http://www.vejpark.kk.dk/byenstrafik/cyklernesby/uk/bicycleaccount2002/

5.0 FUNDING

TABLE 5.1 Bicycle Route Network Improvements, by Street Name

(See Table 5.1 at the end of this document)

TABLE 5.2 Bicycle Route Network Improvements, by Bicycle Route Network Number

(See Table 5.2 at the end of this document)

TABLE 5.3 Bicycle Route Network Improvements, by Fiscal Year

(See Table 5.3 at the end of this document)

6.0 PROGRAM OF PROJECTS

The following pages contain a description of the entire Bicycle Route Network, including potential network improvements that have been identified and ranked through the planning process described in "Public Outreach & Prioritization Criteria". The Bicycle Route Network narratives are listed in numeric Bicycle Route Network order. For consistency, the entire Bicycle Route Network has been retained within the narrative. Please consult Tables 5.1, 5.2, and 5.3 to cross reference projects. For some routes, no immediate improvements have been directly identified, while other routes contain segments that were identified as a "top priority projects". Conceptual Design options were developed for "Top Priority Projects" (Table 6.1) and can be found in Appendix 9a.

Table 6.1 Top Priority Projects	
Project Name	**Existing Route**
Second Street	11
Fifth Street	19
Fourteenth Street	30
Sixteenth/Seventeenth Streets Corridor	40/25
19th Avenue	75
Alemany Boulevard	45
Bayshore Boulevard	5
Broadway Tunnel	10/210
Cesar Chavez/ 26th Streets Corridor	60
Fell Street and Masonic Avenue Intersection	30
Illinois Street and Illinois Street Bridge	5
Laguna Honda Boulevard	65
Upper Market Street, Octavia Boulevard to 17th Street	50
Masonic Avenue Corridor	55
Oakdale Street	170/7
Polk Street	25
Portola Drive	50
Townsend Street	36

Table 5.1 lists Bicycle Network Routes with potential network improvements, promoted by street name; Table 5,2 contains the same information as Table 3.3, except promoted by Route Number; while Table 5.3 is promoted by the application of funds' fiscal year.

In addition to suggestions along the existing Bicycle Route Network, suggestions were also received for segments currently not on the Bicycle Route Network. Conceptual Planning and Design should be developed for these potential projects to determine if they "fill a gap" within the existing Bicycle Route Network.
The most practical time to address these potential new segments is when work is planned by another San Francisco agency. The Department of Public Works' *Five Year Proposed Utility Excavation and Paving Plan* is an excellent starting point for prioritization, for it outlines when streets will excavated and repaved. A repaving of a street generally also involves a restriping of a street, which is a good time to explore potential bicycle facilities. Planning Level cost estimates have been developed and are include within Tables 5.1, 5.2, and 5.3

Program of Projects Narrative

ROUTE 2: NORTH BEACH TO THE PRESIDIO

Network Improvement Project Location(s):

- Marina Boulevard, from Laguna Street to Lyon Street
- North Point Street, from the Embarcadero to Van Ness Avenue

Current Route Description:
Northpoint Street/Marina Boulevard/Old Mason Street

This signed route on Northpoint Street begins at The Embarcadero and connects with the existing path along the north edge of Fort Mason via Van Ness Avenue. From Fort Mason, the route connects to Marina Boulevard then continues through the Presidio on Old Mason Street and Mason Street to Crissy Field Avenue. Due to the one-way segment of Crissy Field Avenue, the east and westbound routes then diverge. Westbound, the route continues via Crissy Field Avenue and Lincoln Boulevard to Merchant Road. The eastbound route is via Lincoln Boulevard, Cowles Street, McDowell Avenue, and Crissy Field Avenue. Connections can be made between Lincoln Boulevard and the Golden Gate Bridge walkways via Routes 95, 202 or 295.

Generalized Opportunities:

- Marina Boulevard, from Laguna Street to Lyon Street
    - Fort Mason Planning Efforts can be found at http://www.nps.gov/goga/admin/planning/pdf/foma-webquality.pdf. In addition, The San Francisco County Transportation Authority (SFCTA) has applied for funding its planned Northern Waterfront pedestrian/Bicycle Study.
    - Improved bicycle facilities should be considered as part of the Muni E-Line planning efforts currently underway: See both the *Market Street Railway*

(MSR) E-Line at http://www.streetcar.org/tomorrow/vision/index.html and Muni's *A Vision for Rapid Transit in San Francisco* at: http://www.sfmuni.com/cms/rptpub/repuindx.htm.

- This bicycle facility is identified as part of the Bay Trail Network. For more information: www.baytrail.abag.ca.gov.
- This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- North Point Street, from the Embarcadero to Van Ness Avenue
  - Bay Trail Planning Efforts
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. Visit the following website for more information: www.mtc.ca.gov.

Generalized Constraints:

- Marina Boulevard, from Laguna Street to Lyon Street
  - Existing paved-over railroad track under existing path has protected historic status and walls at west portal of Fort Mason may also have protected historic status.
  - This project is located along a transit route and transit vehicle operations will need to be considered. Please consult the San Francisco Bicycle Plan: Policy Framework Document's Bicycle and Transit Policy in Chapter 2 for guidance.
  - This project is located in a commercial district. Any parking changes should consider impacts to adjacent property owners.
  - Neighborhood's long history of activism and concern about changes.
  - Potential new light rail E-Line (now under study) connecting Fisherman's Wharf, Fort Mason, and the Presidio. See E-Line: Market Street Railway (MSR) at www.streetcar.org/tomorrow/vision/index.html and Muni's *A Vision for Rapid Transit in San Francisco* at: www.sfmuni.com/cms/rptpub/repuindx.htm.
  - Existing Yacht Harbor parking.
  - Multi-jurisdictional coordination (DPT, DPW, Recreation and Park Department, Port of San Francisco, Golden Gate National Recreation Area, and Association of Bay Area Governments (Bay Trail).

- North Point Street, from the Embarcadero to Van Ness Avenue
  - Neighborhood's long history of activism and concern about changes.
  - This project is located in a commercial district. Any parking changes should consider impacts to adjacent property owners.

Improvement Options:

- Marina Boulevard, from Laguna Street to Lyon Street
  - From the 1997 Plan , two facilities are recommended.

        - On-street bike lanes should be considered, given the existing curb lane widths between Webster Street and Baker Street. However, due to public support for pedestrian improvements, such as median refuges, there may not be enough street width for bike lanes, these options should be considered in a public forum.
        - Given the high demand for access to the waterfront and an off-street facility, the existing multi-use path just north of Marina Boulevard should be improved through striping and/or widening from Laguna to Baker Streets. A separate bicycle path adjacent to the sidewalk can be provided between Buchanan and Scott Streets. Path widening is needed between Laguna and Buchanan Streets and between Scott and Baker Streets. The existing path from Fort Mason should be widened where it joins Laguna Street. The paths within Fort Mason should be resurfaced and signed as necessary.
    - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework. Funds should be sought to develop conceptual designs and plans along this corridor.
- North Point Street, from the Embarcadero to Van Ness Avenue
    - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework. Funds should be sought to develop conceptual designs and plans along this corridor.

ROUTE 4: POLK STREET TO THE PRESIDIO

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process.

Current Route Description:
This route provides access for the residents of the Marina to the Presidio, the Golden Gate Bridge, and Route 25 (Polk Street) via Francisco and Bay Streets. From Polk Street, cyclists can access Route 2 (North Point Street), which connects to Route 5 (The Embarcadero) and Downtown. The existing bike lanes on Bay Street from Laguna Street to Webster Streets provide bicycle access north of the Moscone Recreation Center. Francisco Street (Octavia to Polk Street) has been restriped to remove the downhill westbound bike lane and install a more appropriate uphill eastbound bike lane. (There is not enough width for bike lanes in both directions an uphill bike lane is more important as uphill cyclists are traveling more slowly.) West of Lyon Street, this route continues to the Golden Gate Bridge via Lombard Street, Presidio Boulevard, and Lincoln Boulevard.

Generalized Opportunities
- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Many stop signs along route east of the Presidio.
- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

ROUTE 5: THE EMBARCADERO AT NORTHPOINT STREET TO THE SAN MATEO COUNTY LINE

Network Improvement Project Location(s):

- Third Street, from China Basin to Cargo Way
- Third Street, from Cargo Way to Bayshore Boulevard
- Bayshore Boulevard, from Third Street to San Mateo County line.
- Illinois Street, from China Basin to Cargo Way
- The Embarcadero Promenade, Northpoint Street to King Street

Current Route Description:

The Embarcadero/Third & Illinois Street Corridor/Bayshore Boulevard

Route 5 is accommodated by on-street bicycle facilities along The Embarcadero. One of San Francisco's innovated design treatments, "Floating Bike Lanes" can be found along portions of The Embarcadero. King Street connects The Embarcadero with the Third Street. Bridge crossing the China Basin channel. Route 5 then continues along Terry A. Francois Boulevard and joins Illinois Street. This route previously followed Third Street, but now follows Illinois Street from Terry A. Francois Boulevard to Cargo Way. (*As part of the Third Street Light Rail Project, the bike route has been moved to Illinois Street. Additional accommodations must be provide on the Third Street Light Rail Vehicles (LRV) to allow bicyclists to bring their bicycles on the LRVs, per the Environmental Impact Report mitigation measures for bicyclists)*

From Cargo Way, Route 5 follows Third Street to Bayshore Boulevard, and Bayshore Boulevard to the San Mateo County line.

Generalized Opportunities:

- Third Street, from China Basin to Cargo Way
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- This bicycle facility is identified as part of the Bay Trail Network. For more information, go to http://baytrail.abag.ca.gov.

- Third Street, from Cargo Way to Bayshore Boulevard
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Bayshore Boulevard, from Cesar Chavez Street to the San Mateo County line.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Illinois Street, from China Basin to Cargo Way
  - See summary Illinois Street Summary Sheet in Appendix 9a
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- The Embarcadero Promenade, Northpoint Street to King Street
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.

Generalized Constraints:

- Third Street, from China Basin to Cargo Way
  - Third Street LRVs
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Third Street, from Cargo Way to Bayshore Boulevard
  - Third Street LRVs
  - This project is located along a truck route. Lane widths, truck traffic volumes, and traffic speeds will need to be considered.
  - This project is located in a commercial district. Any parking changes should consider impacts to adjacent property owners.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Bayshore Boulevard, from Cesar Chavez Street to the San Mateo County line.

- Any design should consider possible Bus Rapid Transit (BRT) along this Corridor Please refer to the Bayshore Boulevard Summary Sheets in Appendix 9a.
- This project is located along a transit route and transit vehicle operations will need to be considered. Please consult the San Francisco Bicycle Plan: Policy Framework Document's Bicycle and Transit Policy in Chapter 2 for guidance.
- This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

• Illinois Street, from China Basin to Cargo Way
- Please refer to the Illinois Street Summary Sheets in Appendix 9a.
- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

• The Embarcadero Promenade, Northpoint Street to King Street
- Port of San Francisco Code currently prohibits bicyclists from riding along The Embarcadero Promenade
- Impacts on pedestrians, especially those on senior citizens or the mobility impaired, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
- Adjacent property owners and other stake holders need to be consulted. Mills Corporation Pier 27-29 development activity creates specific considerations for this corridor. Loading docks, driveways, and on-street parking impacts need to be considered.
- This project is located along a truck route. Lane widths, truck traffic volumes, and traffic speeds will need to be considered.

Improvement Options:

• Third Street, from China Basin to Cargo Way
- Move the Bicycle Route Network from Third Street to Illinois Street. Stripe bicycle lanes along Illinois Street. Please refer to the Illinois Street Summary Sheets in Appendix 9a.
- This segment was identified as a change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.

• Third Street, from Cargo Way to Bayshore Boulevard
- Install Shared Lane Pavement Marking, "Sharrows". Explore relocating the Bicycle Route Network along alternative routes through the Bayview and Hunter's Points neighborhoods.
- This segment was identified as a change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.

• Bayshore Boulevard, from Cesar Chavez Street to the San Mateo County line.

- Please refer to Route 25 and the Bayshore Boulevard Summary Sheets in Appendix 9a.

- Illinois Street, from China Basin to Cargo Way
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Illinois Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff has pursued funding to provide bicycle lanes without changing sidewalk widths. This is a combination of several options presented in the Summary Sheets in the Appendix Additionally, the Port of San Francisco and the Better Neighborhood Plans recommend that bicycle lanes not be striped in front of loading zones. Please refer to the Illinois Street Summary Sheets in Appendix 9a.

- The Embarcadero Promenade, Northpoint Street to King Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework. One improvement that has been suggested is a dedicated Class I facility along the Promenade. Please see next bullet.
  - Explore working with the Port of San Francisco to better accommodate bicycle circulation on The Embarcadero Promenade. Bicycles are not currently permitted on the Promenade, which is under the Port of San Francisco's jurisdiction. If the Port Commission determines that bicycles and pedestrians could be safely accommodated on the Promenade, the Port could revise the Port's Harbor Traffic Code to permit bicycling on the Promenade in the future. To avoid precluding future bicycle use of the Promenade, it is recommended that the amount of clear space on the Promenade be maximized. Installations, such as kiosks and luminaries, should be placed as close to the curb as possible. Given the variety and large number of users of the Promenade, adding bicycling to the current mix of uses could be problematic for the Port of San Francisco.

ROUTE 6: RUSSIAN HILL TO THE PRESIDIO (VIA GREENWICH)

Network Improvement Project Location(s):

- Greenwich Street, from Lyon Street to Van Ness Avenue

Current Route Description:
Green Street/Octavia Street/Greenwich Street

This route connects Polk Street to the Presidio via Cow Hollow. Access is provided to Route 2 (North Point Street) via: Route 106 (Octavia Street), Route 4 (Francisco Street), and Route 25 (Polk Street). For access to southbound Route 25 (Polk Street), Octavia and Green Streets avoid the steep hill on Greenwich Street between Van Ness Avenue and Polk Street. At the western end, this route connects to Route 4 at Lyon and Lombard Streets, providing access to the Presidio.

:

- Greenwich Street, from Lyon Street to Van Ness Avenue
    - Limited Muni Service along Greenwich Street (Baker Street to Lyon Street)
    - Expand Bicycle Route Network on Greenwich Street (Van Ness Ave. to Octavia Street)
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Greenwich Street, from Lyon Street to Van Ness Avenue
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
    - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
    - Large number of STOP signs
    - On-Street Parking
    - Topography: Octavia, Gough, Franklin Streets. Van Ness Avenue.
    - One-Way Streets: Gough and Franklin Streets.
    - High Traffic Volume: Van Ness Avenue.

Improvement Options:

- Greenwich Street, from Lyon Street to Van Ness Avenue
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - Explore expanding Bicycle Route Network on Greenwich Street (Van Ness Ave. to Octavia Street)
    - Improve Bicycle Route Signage
    - Explore striping bike lanes along Greenwich Street
    - Explore installing Shared Lane Pavement Markings "Sharrows" along Greenwich Street

ROUTE 7: MISSION BAY TO BAYVIEW NEIGHBORHOOD

Network Improvement Project Location(s):

- Indiana Street, from Twenty-Third Street to Cesar Chavez Street

Current Route Description:

Indiana Street/Illinois Street/Phelps Street/Palou Avenue/Keith Street

This route was originally designed to provide an alternative to Route 5 (Third Street) between Mariposa Street and Carroll Avenue. This route provides access to the 22nd Street Caltrain Station. It provides additional inter-route connections and additional neighborhood access, however its necessity should be re-examined after Illinois Street is striped with Bicycle Lanes.
Route 7 begins at Route 5 (Illinois Street) and continues via Mariposa and Indiana Streets to Cesar Chavez Street (Route 60). Southbound cyclists are routed from Indiana Street via 23rd and Minnesota Streets to Cesar Chavez Street.

The route continues east on Cesar Chavez Street to Illinois Street. Illinois Street (Route 5) is used between Cesar Chavez and Phelps Street so that Islais Creek can be crossed via the new Islais Creek Bridge. Route 7 continues via Phelps Street (that also connects Route 68 (Evans Street) with Routes 70 and 170 (Palou Avenue). The route then continues southeast on Palou Avenue to Keith Street and again connects to Route 5 (Third Street) via Carroll Avenue (Route 805). Connections are made here to Route 5 (Third Street/Bayshore Boulevard) to San Mateo County or Route 805 (Carroll Avenue) to 3Com Park.

Generalized Opportunities:

- Indiana Street, from Twenty-Third Street to Cesar Chavez Street
  - Bicycle Lanes along Illinois Street could improve the overall corridor
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.

Generalized Constraints:

- Indiana Street, from Twenty-Third Street to Cesar Chavez Street
  - Adjacent property owners and other stake holders need to be consulted. Industrial/ Commercial activity creates specific considerations for this corridor. Loading docks, driveways, on-street parking impacts need to be considered.

Improvement Options:

- Indiana Street, from Twenty-Third Street to Cesar Chavez Street

- This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- With the addition of Illinois Street to the Bicycle Route Network, Indiana Street's (from Mariposa Street to Cesar Chavez) necessity should be explored, with potential removal from the Bicycle Route Network

ROUTE 10: THE EMBARCADERO TO SUTRO HEIGHTS

Network Improvement Project Location(s):

- Lake Street, from Third Avenue to Arguello Boulevard
- Pacific Avenue, from Mason to Polk Streets

Current Route Description:
This route provides direct access across the City from The Embarcadero to the Cliff House. Beginning at The Embarcadero (Route 5), Broadway is the flattest route to Webster Street. The Broadway Tunnel, which provides a less challenging grade, presents other challenges. (For more information on See Route 210).

To avoid the Broadway Tunnel, Route 10 follows Pacific Avenue in the eastbound direction from Polk to Mason Streets The westbound route uses the Broadway Tunnel north sidewalk.

Generalized Opportunities:

- Lake Street, from Third Avenue to Arguello Boulevard
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Pacific Avenue, from Polk to Mason Streets
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
  -

Generalized Constraints:

- Lake Street, from Third Avenue to Arguello Boulevard
  - Parking along Lake Street
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
  - This project is located along a truck route. Lane widths, truck traffic volumes, and traffic speeds should be considered.
  - Adjacent property owners and other stake holders need to be consulted. Commercial/ Residential activity creates specific

considerations for this corridor. Driveway and on-street parking impacts need to be considered.
    - This project should involve DPW
    - Impacts on pedestrians, especially those on senior citizens or the mobility impaired, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
- Pacific Avenue, from Polk to Mason Streets
    - Liability to construct a Skykelheis Bicycle Lift

Improvement Options:

- Lake Street, from Third Avenue to Arguello Boulevard
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - Intersection improvements at Lake Street and Arguello Boulevard
    - Stripe Sharrows on Lake Street (between 3rd Avenue and Arguello Boulevard)
- Pacific Avenue, from Polk to Mason Streets
    - Skykelheis Bicycle Lift, similar to Trondheim , Norway- - $1,000,000

ROUTE 11: FISHERMAN'S WHARF TO SBC PARK AND THE CALTRAIN DEPOT

Network Improvement Project Location(s):

- Second Street, from Market Street to King Street
- Columbus Avenue, from Washington Street to Beach Street

Current Route Description:

Columbus Avenue/Sansome Street/Battery Street/Second Street

This route connects Aquatic Park and Fisherman's Wharf with North Beach, the Financial District, and the South of Market Area including the SBC Park and the Caltrain Depot. The route follows Columbus Avenue from Northpoint Street to the Washington Street/Clay Street one-way couplet, which connects to the Sansome Street/Battery Street one-way couplet to provide access to the Financial District. It continues south of Market Street via Second Street to Route 5(King Street/The Embarcadero) and also connects with Route 36 (Townsend Street).

Generalized Opportunities:

- Second Street, from Market Street to King Street
    - Please refer to the Second Street Summary Sheets in Appendix 9a.

- This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Columbus Avenue, from Washington Street to Beach Street
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This project is located in a commercial district. Any parking changes should consider impacts to adjacent property owners.

Generalized Constraints:

- Second Street, from Market Street to King Street
  - Please refer to the Second Street Summary Sheets in Appendix 9a.

- Columbus Avenue, from Washington Street to Beach Street
  - Dense commercial zone with a high demand for parking and high parking turnover.
  - Several Muni routes, including a cable car line.
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This project is located along a transit route and transit vehicle operations will need to be considered. Please consult the San Francisco Bicycle Plan: Policy Framework Document's Bicycle and Transit Policy in Chapter 2 for guidance.
  - This project is located in a commercial district. Any parking changes should consider impacts to adjacent property owners.

Improvement Options:

- Second Street, from Market Street to King Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Second Street was identified as a "Priority Project" during this planning process. Therefore, there was additional development of conceptual

options that received public input and feedback. Taking this into consideration, the San Francisco County Transportation Authority (SFCTA) is pursuing hiring a consultant and an additional staff member to continue work on this project. The SFCTA has not made a determination as to which Second Street option should be pursued. Please refer to the Second Street Summary Sheets in Appendix 9a.

- Depending on the outcome of SFCTA's review, an EIR may be necessary for this project

- Columbus Avenue, from Washington Street to Beach Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Install "Sharrows", BIKES ALLOWED USE OF FULL LANE (BAUFL) signage, and explore better pavement markings for the cable car tracks.

ROUTE 16: MARKET STREET TO PRESIDIO AVENUE

Network Improvement Project Location(s):

- Post Street, from Steiner Street to Market Street
- Sutter Street, from Market Street to Steiner Street

Current Route Description:

(Route 16) travels the Sutter Street (westbound)/Post Street(eastbound) couplet between Market (Route 50) and Steiner Street and bi-directionally on the Post Street Bike Lanes from Steiner to Presidio Avenue (Route 55). High traffic volumes on parallel streets designated as major thoroughfares, such as Geary, Pine, and Bush Streets, make Post/Sutter the preferred bicycle route. (Route 16) also provides connections with several north-south routes:(Route 17) Stockton Street, (Route 25) Polk Street, (Route 345) Webster Street, and (Route 45) Steiner Street.

Generalized Opportunities:

- Post Street, from Steiner Street to Market Street
  - Re-paving (from Market to Powell), is estimated to begin on 1/1/05 per tentative DPW schedule.
  - The combined resources resulting form the DPT/Muni merger give MTA a unique opportunity to create a showcase example of the City's Transit First Policy by integrating transit, pedestrians, and bicycles access along this important transportation corridor.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and

integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Sutter Street, from Market Street to Steiner Street
    - Matching potential installation of shared bus/bike lanes with DPW's repaving schedule could offer significant cost savings. Some of the starting dates, per DPW's tentative schedule, for re-pavement on the Bicycle Route Network include:
        - Post Street (Market to Powell): 01/01/05.
        - Sutter Street (Market to Powell): 01/01/05
        - Jersey Street (Castro to Douglas): 02/01/05
        - North Point Street (Embarcadero to Van Ness) 04/01/05
    - The combined resources resulting form the DPT/Muni merger give MTA a unique opportunity to create a showcase example of the City's Transit First Policy by integrating transit, pedestrians, and bicycles access along this important transportation corridor.
    - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Post Street, from Market Street to Steiner Street
    - Before the bus-only lanes can be converted to shared lanes, DPT will work with Muni as described within the *Bicycle Plan: Policy Framework*
    - The Japantown Neighborhood has repeatedly stated in very strong terms that they oppose bicycle lanes along Post Street.
    - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Sutter Street, from Market Street to Steiner Street
    - Before the bus-only lanes can be converted to shared lanes, DPT will work with Muni as described within the *Bicycle Plan: Policy Framework*
    - The Japantown Neighborhood has repeatedly stated in very strong terms that they oppose bicycle lanes along Post Street.
    - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Post Street, from Steiner Street to Market Street

  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Shared Bus/Bike Lanes along Post and Sutter
  - "Sharrows" combined with lane reductions, from three narrow travel lanes, to two travel lanes.

- Sutter Street, from Market Street to Steiner Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Shared Bus/Bike Lanes along Post and Sutter
  - "Sharrows" combined with lane reductions, from three narrow travel lanes, to two travel lanes.

ROUTE 17: NORTH BEACH TO UNION SQUARE (VIA STOCKTON STREET)

Network Improvement Project Location(s):

- Stockton Street, from Broadway to Market Street

Current Route Description:

Route 17 serves North Beach, Chinatown, the Union Square shopping district, and the Financial District. The Stockton Tunnel provides realitively flat access through Nob Hill, not available on parallel streets. Cyclists cannot access northbound Route 17 from eastbound Route 16 (Post Street), since Stockton Street is one-way southbound between Sutter and Market Streets. Northbound Route 17 follows Post Street, Grant Avenue, Sutter Street, to Stockton Street.

Generalized Opportunities:

- Stockton Street, from Broadway to Market Street
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Stockton Street, from Broadway to Market Street
  - Confined right-of-way within the Stockton Tunnel
  - Frequent Muni bus service along Stockton Street

- Dense commercial zone with a high demand for parking and high parking turnover.
- Deliveries, double parking, and pedestrians walking in the narrow street in Chinatown.
- Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
- Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
- This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Stockton Street, from Broadway to Market Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - DPT Recommends Conceptual Planning and Design to:
    - Further improve Cycling Conditions within the Stockton Tunnel; As recommended in the 1997 Bicycle Plan, DPT re-striped the Stockton Tunnel to create the existing northbound (uphill) bike lane. In the uphill direction, cyclists generally travel slower than motor vehicles and therefore greatly benefit from this bike lane. In the southbound (downhill) direction, most cyclists should be able to travel at speeds comparable to motor vehicles and the need for a bike lane is less crucial. However, removing one of the two southbound travel lanes in the tunnel so that a southbound bike lane can be striped should be studied.
    - Explore a Contra-flow Bike Lane on Stockton Street between Sutter Street and Post Street;
    - Explore Striping Bike Lanes on Stockton Street, from Broadway to Market Street; or
    - Explore installing "Sharrows" on Stockton Street, from Broadway to Market Street

ROUTE 19: MARKET STREET TO CALTRAIN DEPOT

Network Improvement Project Location(s):

- Fifth Street, from Market Street to Townsend Street

Current Route Description:
Cyclists on Route 19 can connect to Market Street (Route 50) and Townsend Street (Route 36). This is an important connection within the SOMA neighborhood, and is one of the primary connectors of the Mission Bay Development to Downtown. Route 19 continues along 4th Street and connects to Third Street.

Generalized Opportunities:
- Fifth Street, from Market Street to Townsend Street
  - Please refer to the Fifth Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:
- Fifth Street, from Market Street to Townsend Street
  - Please refer to the Fifth Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - The General Plan's Transportation Element classifies 4th Street between Townsend Street and 3rd Street as an important truck route, a Transit Important Street in the Transit Priority Streets Network, and a Major Arterial. Provisions will be made to accommodate bicycles without interfering with the operation of the other primary transportation modes on this segment of 4th Street.

Improvement Options:
- Fifth Street, from Market Street to Townsend Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Fifth Street was identified as a "Priority Project" during this planning process. Therefore, there was additional development of conceptual options that received public input and feedback. Taking this into consideration, the SFCTA is pursuing hiring a consultant and an additional staff member to continue work on this project. The SFCTA has not made a determination as to which Fifth Street option should be pursued. Please refer to the Fifth Street Summary Sheets in Appendix 9a.
  - Depending on the outcome of SFCTA's review, an EIR may be necessary of this project

- Fourth Street, from Townsend Street to Third Street; and Mission Rock, from Third Street to Terry A Francois Boulevard.
    - DPT Recommends Conceptual Planning and Design to extend Route 19 to Illinois Street.

ROUTE 20: MARKET STREET TO OCEAN BEACH

Network Improvement Project Location(s):

- Golden Gate Avenue, from Parker Avenue to Baker Street
- Parker Avenue, from Turk Street to Golden Gate Avenue
- Mc Allister Street, from Market Street to Baker Street
- Mc Allister Street, from Baker Street to Polk Street
- Grove Street, from Van Ness Avenue to Octavia Boulevard

Current Route Description:

McAllister Street /Turk Street/Fulton Street/Cabrillo Street

This cross-town route provides access for cyclists traveling on Route 50 (Market Street) and Route 23 (7th and 8th Streets) to the Western Addition and the Richmond District, ending at the Great Highway (Route 95). It intersects many north-south routes, offering connections to many parts of the City, including the Civic Center, the University of San Francisco, and Golden Gate Park.

(Westbound route): Starts at Market Street, travels along McAllister Street through the Western Addition to Baker Street. At this point, westbound and eastbound Route 20 travel along the same streets: Baker Street, Golden Gate Avenue, Parker Avenue, Turk Street, Arguello Boulevard, and Cabrillo Street.

(Eastbound route): Starts along Cabrillo Street and travels along the route above in reverse, but diverges along Baker Street where it turns east on Fulton Street to Octavia Street, then to Grove Street, and finally to Market Street where it ends.

This route was modified from the route described in the 1997 Bicycle Plan for a number of reasons. First, when Golden Gate Avenue was repaved, it provided an opportunity to remove a motor vehicle lane on a portion of the street and add bicycle lanes. Also, bike lanes were added on Baker Street between McAllister Street and Golden Gate Avenue. While the original Route 20 required cyclists to make a somewhat difficult left turn from Masonic Avenue onto McAllister Street, the new route does not, making it easier to navigate. Finally, this reroute takes cyclists off a portion of McAllister Street which is a Secondary Transit Street.

Further modification of this route could take place at its east end. If the outbound Market Street to eastbound Grove Street connection can be improved, it would be

possible to reroute eastbound Route 20 from McAllister to Grove Street, thereby allowing both eastbound and westbound cyclists to travel along Grove Street from Market Street to Octavia Street.

Generalized Opportunities:

- Golden Gate Avenue, from Parker Avenue to Baker Street
- Parker Avenue, from Turk Street to Golden Gate Avenue
- McAllister Street, from Market Street to Baker Street

- Grove Street, from Van Ness Avenue to Octavia Boulevard
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Golden Gate Avenue, from Parker Avenue to Baker Street
- Parker Avenue, from Turk Street to Golden Gate Avenue
- McAllister Street, from Market Street to Baker Street
    - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
    - It is acknowledged that the General Plan's Transportation Element classifies McAllister Street between Central Avenue and Market Street as a Secondary Transit Street in the Transit Priority Streets Network. Provisions will be made to accommodate bicycles without interfering with the operation of transit on this segment of McAllister Street.
- Mc Allister Street, from Baker Street to Polk Street
    - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
    - It is acknowledged that the General Plan's Transportation Element classifies McAllister Street between Central Avenue and Market Street as a Secondary Transit Street in the Transit Priority Streets Network. Provisions will be made to accommodate bicycles without interfering with the operation of transit on this segment of McAllister Street.
- Grove Street, from Van Ness Avenue to Octavia Boulevard
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Golden Gate Avenue, from Parker Avenue to Baker Street
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
- Grove Street, from Van Ness Avenue to Octavia Boulevard
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
- McAllister Street, from Market Street to Baker Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- Parker Avenue, from Turk Street to Golden Gate Avenue
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.

ROUTE 23: MISSION BAY (MARIPOSA STREET) TO CIVIC CENTER

Network Improvement Project Location(s):

- Mariposa Street, from Pennsylvania Avenue to Indiana Street

Current Route Description:

7th Street & 8th Street Couplet/Mississippi Street/Mariposa Street

North of Townsend Street, the 7th Street/8th Street one-way couplet connects South of Market, China Basin and Potrero Hill. South of Townsend Street, Route 23 continues via the two-way portion of 7th Street, Mississippi Street, and Mariposa Street, where it ends at Route 7 (Indiana Street).

Generalized Opportunities:

- Mariposa Street, from Pennsylvania Avenue to Indiana Street
  - DPT has obtained grant funds to stripe and sign bike lanes on Mississippi Street from 16th to Mariposa Streets.

Generalized Constraints:

- Mariposa Street, from Pennsylvania Avenue to Indiana Street
  - It is acknowledged that the General Plan's Transportation Element classifies 8th Street between Market Street and Townsend Street as an important truck route and a Major Arterial. However, Action 8.3 of this Bicycle Plan's Policy Framework calls for amending the Transportation Element so that Area Plans are consistent with goals of the Bicycle Policy Framework. Intra- and interdepartmental discussions should be undertaken with the goal of safely accommodating bicycles without interfering with the operation of the other primary transportation modes on this segment of 8th Street.

Improvement Options:

- Mariposa Street, from Pennsylvania Avenue to Indiana Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - DPT has obtained grant funds to stripe and sign bike lanes on Mississippi Street from 16th to Mariposa Streets

ROUTE 25: AQUATIC PARK (POLK STREET) TO VISITATION VALLEY (BAYSHORE BOULEVARD)

Network Improvement Project Location(s):

- Polk Street, from Mc Allister Street to Grove Street
- Polk Street, from Grove Street to Lech Walesa Street
- Polk Street, Lech Walesa Street to Hayes Street
- Polk Street, from Hayes Street to Market Street
- Eleventh Street, from Market Street to Mission Street
- Potrero Avenue, from Division Street to 17th Street
- Potrero Avenue, from 17th Street to Cesar Chavez Street
- Bayshore Boulevard Cesar Chavez Street to US 101 Off ramp
- Bayshore Boulevard US 101 Off ramp to Industrial Street
- Jerrold Avenue, from Bayshore Boulevard to Barneveld Avenue (southbound)
- Barneveld Avenue Jerrold Avenue to Loomis Street (southbound)
- Loomis Street Barneveld Avenue to Industrial Street (southbound)
- Industrial Street Loomis Street to Bayshore Boulevard (southbound)
- Bayshore Boulevard Industrial Street to Silver Avenue
- Bayshore Boulevard Silver Avenue to Fitzgerald Avenue
- Bayshore Boulevard Fitzgerald Avenue to Paul Avenue
- Bayshore Boulevard Paul Avenue to Mansell Street
- Bayshore Boulevard Mansell Street to Hester Avenue

Current Route Description:

Polk Street/10th Street/Howard Street/11th Street/Harrison Street/17th Street/Potrero Avenue/Bayshore Boulevard/San Bruno Avenue

Route 25 connects Aquatic Park, Civic Center, the Mission District, Bernal Heights, Bay View and Visitacion Valley. It begins at Route 2 (Northpoint Street) and proceeds south on Polk Street to Route 50 (Market Street). Larkin Street is designated the northbound route between Grove and Market Streets, since Polk Street is one-way southbound, between Grove and Market Street. Northbound cyclists are routed along 11th Street, while southbound are routed to 10th Street to Howard Street back to 11th Street. The route continues from 11th Street to Harrison Street. From Harrison Street the route continues to Potrero Avenue via 17th Street (also Route 40). From Potrero Avenue the

route continues to 17th Street and its intersection with Cesar Chavez Street and Bayshore Boulevard at US 101.

The connection between Potrero Avenue and Bayshore Boulevard is important for the continuity of this route, which serves the City's eastern industrial districts as well as Bayview, Hunters Point and Candle Stick Stadium. The Potrero Avenue/Cesar Chavez Street/Bayshore Boulevard/US 101 interchange is a major challenge for cyclists. To continue on Route 25 in either direction through this interchange, cyclists must weave across several lanes of fast moving traffic onto raised ramps, overcrossings and off-ramps. Another alternative is Route 525 (Twenty Third Street/Kansas Street).

From Potrero Avenue, Route 25 continues via Bayshore Boulevard to Route 5 (Third Street), which continues south to San Mateo County. Until bicycle related improvements are made at the Bayshore Boulevard/ Third Street/US 101 intersection, the following interim route is recommended: Bayshore Boulevard, Paul Avenue, and San Bruno Avenue to Route 5 (Bayshore Boulevard).

Generalized Opportunities:

- Polk Street, from Mc Allister Street to Grove Street
    - Please refer to the Polk Street Summary Sheets in Appendix 9a.
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Polk Street, from Grove Street to Lech Walesa Street
    - Please refer to the Polk Street Summary Sheets in Appendix 9a.
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Polk Street, Lech Walesa Street to Hayes Street
    - Please refer to the Polk Street Summary Sheets in Appendix 9a.
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Polk Street, from Hayes Street to Market Street
- Polk Street, from Market Street to Mc Allister Street
    - Please refer to the Polk Street Summary Sheets in Appendix 9a.

  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Eleventh Street, from Market Street to Mission Street
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Potrero Avenue, from Division Street to 17th Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov
- Potrero Avenue, from 17th Street to Cesar Chavez Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov
- Bayshore Boulevard Cesar Chavez Street to US 101 Off ramp
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Bayshore Boulevard US 101 Off ramp to Industrial Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Jerrold Avenue, from Bayshore Boulevard to Barneveld Avenue (southbound).
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Barneveld Avenue Jerrold Avenue to Loomis Street (southbound)
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Loomis Street Barneveld Avenue to Industrial Street (southbound)
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Industrial Street Loomis Street to Bayshore Boulevard (southbound)
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Bayshore Boulevard Industrial Street to Silver Avenue
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Bayshore Boulevard Silver Avenue to Fitzgerald Avenue
- Bayshore Boulevard San Bruno Avenue to Cesar Chavez
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Bayshore Boulevard Fitzgerald Avenue to Paul Avenue
- Bayshore Boulevard San Bruno Avenue to Cesar Chavez
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Bayshore Boulevard Paul Avenue to Mansell Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Bayshore Boulevard Mansell Street to Hester Avenue
  - Please refer to the Bayshore Boulevard Summary Sheets in Appendix 9a.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Potrero Avenue, from Division Street to 17th Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

  This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov

Generalized Constraints:

- Polk Street, from Mc Allister Street to Grove Street
  - Please refer to the Polk Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Polk Street, from Grove Street to Lech Walesa Street
  - Please refer to the Polk Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Polk Street, Lech Walesa Street to Hayes Street
  - Please refer to the Polk Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Polk Street, from Hayes Street to Market Street
  - Please refer to the Polk Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Eleventh Street, from Market Street to Mission Street

- Potrero Avenue, from Division Street to 17th Street
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - Any parking changes should consider impacts to adjacent property owners.
  - Adjacent property owners and other stake holders need to be consulted. Commercial and Residential activity creates specific considerations for this corridor. Driveway and on-street parking impacts need to be considered
- Potrero Avenue, from 17th Street to Cesar Chavez Street
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Bayshore Boulevard Cesar Chavez Street to US 101 Off ramp
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Bayshore Boulevard US 101 Off ramp to Industrial Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Jerrold Avenue, from Bayshore Boulevard to Barneveld Avenue (southbound)
- Barneveld Avenue Jerrold Avenue to Loomis Street (southbound)
- Loomis Street Barneveld Avenue to Industrial Street (southbound)
- Industrial Street Loomis Street to Bayshore Boulevard (southbound)
  - Please refer to the Bayshore Boulevard Summary Sheets in Appendix 9a.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Bayshore Boulevard Industrial Street to Silver Avenue
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and

integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Bayshore Boulevard Silver Avenue to Fitzgerald Avenue
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Bayshore Boulevard Fitzgerald Avenue to Paul Avenue
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Bayshore Boulevard Paul Avenue to Mansell Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Bayshore Boulevard Mansell Street to Hester Avenue
  - Please refer to the Bayshore Boulevard Summary Sheets in Appendix 9a.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Polk Street, from Mc Allister Street to Grove Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Polk Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends the exploration of installing contra-flow bike lanes, however some outreach still needs to occur and PS&Es still need to be developed.
- Polk Street, from Grove Street to Lech Walesa Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Polk Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends the exploration of installing contra-flow bike lanes, however some outreach still needs to occur and PS&Es still need to be developed.
- Polk Street, Lech Walesa Street to Hayes Street

  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Polk Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends the exploration of installing contra-flow bike lanes, however some outreach still needs to occur and PS&Es still need to be developed.
- Polk Street, from Hayes Street to Market Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Polk Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends the exploration of installing contra-flow bike lanes, however some outreach still needs to occur and PS&Es still need to be developed.
- Eleventh Street, from Market Street to Mission Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- Potrero Avenue, from Division Street to 17th Street
- Potrero Avenue, from 17th Street to Cesar Chavez Street
- Bayshore Boulevard Cesar Chavez Street to US 101 Off ramp
  - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
  - Bayshore Boulevard was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: Option 1 be explored for section A, option 1 for section B, option 1 for section C, and option 1 for section D. For section E, staff recommends that the narrowing of the median be explored to accommodate the northbound direction, while the southbound direction will utilize Loomis Street. Section F requires Preliminary Design and Engineering to be developed and should be coordinated with improvements to the Cesar Chavez Street/Potrero Street/ 101 interchange improvements. These options were selected with the understanding that parking removal would better accommodate a bicycle facility and Muni BRT plans. Please refer the Bayshore Boulevard Summary Sheets in Appendix 9a.
- Bayshore Boulevard US 101 Off ramp to Industrial Street
  - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
  - Bayshore Boulevard was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: Option 1 be explored for section

A, option 1 for section B, option 1 for section C, and option 1 for section D. For section E, staff recommends that the narrowing of the median be explored to accommodate the northbound direction, while the southbound direction will utilize Loomis Street. Section F requires Preliminary Design and Engineering to be developed and should be coordinated with improvements to the Cesar Chavez Street/Potrero Street/ 101 interchange improvements. These options were selected with the understanding that parking removal would better accommodate a bicycle facility and Muni BRT plans. Please refer the Bayshore Boulevard Summary Sheets in Appendix 9a.

- Jerrold Avenue, from Bayshore Boulevard to Barneveld Avenue (southbound)
  - These segments were identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Include Loomis Street, from Oakdale to Industrial Street, on the Bicycle Network.
  - Install " Sharrows" and BIKES ALLOWED USE OF FULL LANE (BAUFL) signage
  - Install Bike Lanes
- Barneveld Avenue Jerrold Avenue to Loomis Street (southbound)
  - These segments were identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Include Loomis Street, from Oakdale to Industrial Street, on the Bicycle Network.
  - Install " Sharrows" and BIKES ALLOWED USE OF FULL LANE (BAUFL) signage
  - Install Bike Lanes
- Loomis Street Barneveld Avenue to Industrial Street (southbound)
  - These segments were identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Include Loomis Street, from Oakdale to Industrial Street, on the Bicycle Network.
  - Install " Sharrows" and BIKES ALLOWED USE OF FULL LANE (BAUFL) signage
  - Install Bike Lanes
- Industrial Street Loomis Street to Bayshore Boulevard (southbound)
  - These segments were identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Include Loomis Street, from Oakdale to Industrial Street, on the Bicycle Network.
  - Install " Sharrows" and BIKES ALLOWED USE OF FULL LANE (BAUFL) signage
  - Install Bike Lanes
- Bayshore Boulevard Industrial Street to Silver Avenue
  - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
  - Bayshore Boulevard was identified as a "Priority Project", therefore during the planning process there was additional development of

conceptual options that received public input and feedback. Taking this into consideration, staff recommends: Option 1 be explored for section A, option 1 for section B, option 1 for section C, and option 1 for section D. For section E, staff recommends that the narrowing of the median be explored to accommodate the northbound direction, while the southbound direction will utilize Loomis Street. Section F requires Preliminary Design and Engineering to be developed and should be coordinated with improvements to the Cesar Chavez Street/Potrero Street/ 101 interchange improvements. These options were selected with the understanding that parking removal would better accommodate a bicycle facility and Muni BRT plans. Please refer the Bayshore Boulevard Summary Sheets in Appendix 9a.

- Bayshore Boulevard Silver Avenue to Fitzgerald Avenue
    - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
    - Bayshore Boulevard was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: Option 1 be explored for section A, option 1 for section B, option 1 for section C, and option 1 for section D. For section E, staff recommends that the narrowing of the median be explored to accommodate the northbound direction, while the southbound direction will utilize Loomis Street. Section F requires Preliminary Design and Engineering to be developed and should be coordinated with improvements to the Cesar Chavez Street/Potrero Street/ 101 interchange improvements. These options were selected with the understanding that parking removal would better accommodate a bicycle facility and Muni BRT plans. Please refer the Bayshore Boulevard Summary Sheets in Appendix 9a.
- Bayshore Boulevard Fitzgerald Avenue to Paul Avenue
    - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
    - Bayshore Boulevard was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: Option 1 be explored for section A, option 1 for section B, option 1 for section C, and option 1 for section D. For section E, staff recommends that the narrowing of the median be explored to accommodate the northbound direction, while the southbound direction will utilize Loomis Street. Section F requires Preliminary Design and Engineering to be developed and should be coordinated with improvements to the Cesar Chavez Street/Potrero Street/ 101 interchange improvements. These options were selected with the understanding that parking removal would better accommodate a bicycle facility and Muni BRT plans. Please refer the Bayshore Boulevard Summary Sheets in Appendix 9a.
- Bayshore Boulevard Paul Avenue to Mansell Street.

  - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
  - Bayshore Boulevard was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: Option 1 be explored for section A, option 1 for section B, option 1 for section C, and option 1 for section D. For section E, staff recommends that the narrowing of the median be explored to accommodate the northbound direction, while the southbound direction will utilize Loomis Street. Section F requires Preliminary Design and Engineering to be developed and should be coordinated with improvements to the Cesar Chavez Street/Potrero Street/ 101 interchange improvements. These options were selected with the understanding that parking removal would better accommodate a bicycle facility and Muni BRT plans. Please refer the Bayshore Boulevard Summary Sheets in Appendix 9a.
- Bayshore Boulevard Mansell Street to Hester Avenue.
  - This segment was identified as a Study Area within the Bicycle Plan: Policy Framework.

NOTE – Must move the following 2 items to correct location above:

- Potrero Avenue, from Division Street to 17th Street
  - Add
- Potrero Avenue, from 17th Street to Cesar Chavez Street
  - Add

ROUTE 30: THE EMBARCADERO (SOUTH OF MARKET) TO OCEAN BEACH (VIA GOLDEN GATE PARK)

Network Improvement Project Location(s):

- Ashbury Street, from Page Street to Panhandle Path
- Baker Street, from Page Street to Panhandle Path
- Clayton Street, from Page Street to Panhandle Path
- Duboce Avenue, from Valencia Street to Market Street
- Fourteenth Street, from Market Street to Dolores Street
- Hayes Street, from Scott Street to Baker Street
- John F. Kennedy Drive, from Stanyan Street to Great Highway
- McCoppin Street, from Valencia Street to Market Street
- Panhandle Path, at the intersection of Fell Street and Masonic Avenue
- The "Wiggle", from Duboce Bikeway, to Steiner Street, to Waller Street, to Pierce Street, to Haight Street, to Scott Street, to Fell Street.

Current Route Description:

Howard Street/Folsom Street Couplet/14th Street/Duboce Avenue/ The "Wiggle"[6]/Panhandle Multi-Use Path/John F. Kennedy Drive

Beginning in the east with the Howard Street/Folsom Street one-way couplet, this route provides relatively level access across San Francisco from the South of Market Area (SOMA), through Golden Gate Park, to Ocean Beach. The Howard Street/Folsom Street couplet provides a link between the Central Business District (CBD) and the Mission District connecting Route 25 (Eleventh Street/Harrison Street).

At 11th Street, the eastbound and westbound routes diverge until Sanchez Street. Both directions of route 30 then continue together via the "Wiggle", the Panhandle Multi-Use Path, and John F. Kennedy Drive in Golden Gate Park.

The westbound route from Howard Street is via 11th, Mission, Otis, McCoppin, and Market Streets and Duboce Avenue to Sanchez Street. Although Mission Street has heavy bus traffic and its right lane is narrow, it is only used for two blocks.

The eastbound route to Folsom Street is via Sanchez and 14th Streets. The Duboce Bikeway and the "Wiggle" provide an extremely important connection, particularly in the westbound direction, between Market Street and the Panhandle.

From the Duboce Bikeway and Sanchez Street route 30 continues via Steiner, Waller, Pierce and Scott Streets. It is coincident with and connects with Route 47 (Scott, Waller, and Sanchez Streets). Due to the significant grades (greater than 15 percent) on Page and Haight Streets, the route continues on Fell Street for three blocks between Scott and Baker Streets.

Route 30 continues on the Panhandle Multi-Use Path to Golden Gate Park. The intersection of this path and Masonic Avenue should be improved and has been studied as part of the 2004 Bicycle Plan Update planning process.

At the intersection of Fell and Shrader Streets, a bicycle and pedestrian signal phase has been installed, dubbed the "Shrader Valve"[2], because it eases path user congestion at the end of the Panhandle Path at Stanyan Street by diverting westbound cyclists to a bike lane on Fell Street. In Golden Gate Park, the route follows John F. Kennedy Drive to the Great Highway (Route 95).

Generalized Opportunities:

- Ashbury Street, from Page Street to Panhandle Path

[6] The "Wiggle" is the name local bicyclists have given to the routes which connect Upper Market to the Panhandle and avoid the major hills.

[2] A Shrader Valve is a valve typically found on a mountain bike tube. The path entrance to a bicycle lane that leads into Golden Gate Park occurs at Shrader Street.

  - Golden Gate Park Master Plan
- Baker Street, from Page Street to Panhandle Path
  - Golden Gate Park Master Plan
- Clayton Street, from Page Street to Panhandle Path
  - Golden Gate Park Master Plan
- Duboce Avenue, from Valencia Street to Market Street
- Fourteenth Street, from Market Street to Dolores Street
  - Please refer to the 14th Street Summary Sheets in Appendix 9a.
- Hayes Street, from Scott Street to Baker Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- JFK Drive, from Stanyan Street to Great Highway
  - This bicycle facility has been identified within the MTC Regional Bikeway System. Refer to the following MTC web link for more information: www.mtc.ca.gov.
- Mc Coppin Street, from Valencia Street to Market Street
- Panhandle Path, at the intersection of Fell Street and Masonic Avenue
  - Please refer to the Fell and Masonic Intersection Summary Sheets in Appendix 9a.
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility has been identified within the MTC Regional Bikeway System. Refer to the following MTC web link for more information: www.mtc.ca.gov
- The "Wiggle", from Duboce Bikeway, to Steiner Street, to Waller Street, to Pierce Street, to Haight Street, to Scott Street, to Fell Street.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility has been identified within the MTC Regional Bikeway System. Refer to the following MTC web link for more information: www.mtc.ca.gov.

Generalized Constraints:

- Ashbury Street, from Page Street to Panhandle Path
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.

- Baker Street, from Page Street to Panhandle Path
    - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.

- Clayton Street, from Page Street to Panhandle Path
    - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.

- Duboce Avenue, from Valencia Street to Market Street
    - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
    - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.

- Fourteenth Street, from Market Street to Dolores Street
    - Please refer to the 14th Street Summary Sheets in Appendix 9a.
- Hayes Street, from Scott Street to Baker Street
    - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- JFK Drive, from Stanyan Street to Great Highway
    - This project should involve Department of Recreation and Park

- Mc Coppin Street, from Valencia Street to Market Street
- Panhandle Path, at the intersection of Fell Street and Masonic Avenue
    - Please refer to the Fell and Masonic Intersection Summary Sheets in Appendix 9a.
    - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
    - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- The "Wiggle", from Duboce Bikeway, to Steiner Street, to Waller Street, to Pierce Street, to Haight Street, to Scott Street, to Fell Street.
    - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
    - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
    - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and

integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Clayton Street, from Page Street to Panhandle Path
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- Ashbury Street, from Page Street to Panhandle Path
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Improve path and signage between the Panhandle Path and Page Street to allow for a better connection to Page Street.
- Baker Street, from Page Street to Panhandle Path
  - Improve path and signage between the Panhandle Path and Page Street to allow for a better connection to Page Street. Clayton Street, from Page Street to Panhandle Path
  - Improve path and signage between the Panhandle Path and Page Street to allow for a better connection to Page Street..
- Duboce Avenue, from Valencia Street to Market Street
  - Uphill Bike Lanes (westbound), and a bicycle box at the intersection of Duboce Avenue and Market Street to provide a better connection to the Duboce Bikeway.
- Fourteenth Street, from Market Street to Dolores Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - DPT recommends Option B be pursued for Preliminary Design and Engineering to stripe and sign a new bike lane by converting the street from two-way to one-way operation (eastbound) that includes concrete island removal and pavement restoration). DPT has obtained grant funds for the Preliminary Design and Engineering. Please refer to the Fourteenth Street Summary Sheets in Appendix 9a.
- Hayes Street, from Scott Street to Baker Street
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - DPT recommends removing this portion of Hayes Street from the Bicycle Route Network. The 1997 Bicycle Plan specified that this portion of the route was temporary until bike lanes could be striped on Fell Street (that has been done).
- JFK Drive, from Stanyan Street to Great Highway
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - The Golden Gate Park Traffic Calming Concept Plan (approved by the Golden Gate Park Concourse Authority (GGPCA) and its EIR certified by the Planning Commission) includes striped bike lanes on JFK Drive.[8]

[8] Bicycle improvements along JFK Drive have been part of planning for Golden Gate Park for quite some time. The 1998 Golden Gate Park Master Plan included a multi-use bicycle and pedestrian path along JFK

With GGPCA funds as a local match, DPT applied for funds for the fist phase of these 1.5 mile bike lanes (striping and signing between Stanyan Street/Kezar Dr. and Transverse Drive, including ADA/safety improvements at seven crosswalks, and associated signage). Bike lanes west of Crossover Drive to The Great Highway are recommended, but no additional GGPCA funds are available until the GGPCA garage debt is paid off. DPT will pursue other funding options.

- Mc Coppin Street, from Valencia Street to Market Street
    - Mc Coppin Street from Valencia Street to Market Street has been closed to motor vehicle traffic since the construction of Octavia Boulevard. A multi-use path is proposed at this location. Safety, signing, and lighting issues should be adequately explored.
- Panhandle Path, at the intersection of Fell Street and Masonic Avenue
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - DPT recommends Option A be pursued for Preliminary Design, Engineering, and Construction at this time. This option involves removing approximately three on-street parking spaces on Fell Street to increase visibility of the Panhandle path, instituting an advance walk traffic signal phase to allow bicyclists and pedestrians to get a "head start" on motor vehicles, striping a high-visibility "ladder" crosswalk, relocating the stop limit line for northbound Masonic Street, and installing additional "Yield to Bikes and Peds" signage. DPT has obtained grant funds for the Preliminary Design, Engineering, and Construction of Option A. Part of the work scope for these funds requires that DPT evaluate the effectiveness of Option A in improving cyclists' safety before considering Options B or C, suggested in Fell and Masonic Intersection Street Summary Sheets. Please refer to the Fell and Masonic Intersection Street Summary Sheets in Appendix 9a.
- The "Wiggle", from Duboce Bikeway, to Fell Street via Steiner, Waller , Pierce , Haight , and Scott Streets.
    - These segments were recommended for improvements within the Bicycle Plan: Policy Framework.
    - DPT recommends an improved signage and that a marking program be implemented to highlight this unique and important "center hub" of the Bicycle Route Network.

ROUTE 32: VAN NESS AND MARKET TO GOLDEN GATE PARK (VIA PAGE)

Network Improvement Project Location(s):

- Page Street, from Stanyan Street to Market Street

Drive. This concept was changed to on-street bicycle lanes on the existing roadway in response to input from bicycle stakeholder groups during development of the 2002 Golden Gate Park Transportation Improvement Program (TIP).

- Intersection of Page Street and Stanyan Street, path crossing.

Current Route Description:
Page Street/Golden Gate Park

Page Street provides an excellent route to and from Market Street to Golden Gate Park. For eastbound bicyclists, Page Street is a wonderful downhill to Market Street. Once in Golden Gate Park, Route 32 connects with Route 365 (Kezar Drive Path) and with Route 30 (JFK Drive) via multi-use paths.

Generalized Opportunities:

- Page Street, from Stanyan Street to Market Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Intersection of Page Street and Stanyan Street, path crossing.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Page Street, from Stanyan Street to Market Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Intersection of Page Street and Stanyan Street, path crossing.

  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Page Street, from Stanyan Street to Market Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Install "Sharrows" for the entire length of Page Street.
  - Intersection of Page Street and Stanyan Street, path crossing.
  - Signalize the intersection of Page and Stanyan Streets. (DPT analysis
  - determined that this intersection meets signalization warrants, but funds need to identified.)

  - Redesign the east end of the existing path in Golden Gate Park allow more convenient straight bicycle through access (while maintaining bicycle safety and ADA compliance)
  - Install new signs with both pedestrian and bicycle warning symbols and a "PED XING" logo in advance of the crosswalk.

- Intersection of Page Street and Stanyan Street, path crossing
  - Traffic signal and signs $175,000 - $200,000

ROUTE 33: HARRISON STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process.

Current Route Description:
Harrison Street
This route provides cyclists traveling on Route 25 (11th Street/Harrison Street) the opportunity to remain on Harrison Street south of 17th Street to Cesar Chavez Street.

Generalized Opportunities:
Generalized Constraints:

- Stripe bike lanes between 22nd and 26th Streets.
  - A travel lane would need to be eliminated between 22nd and 26th Streets.
  - Extensive angle parking exists on these blocks and parking is in high demand in this dense residential neighborhood.

Improvement Options:

- From the 1997 Plan, Explore striping bike lanes between 22nd and 26th Streets.

ROUTE 34: MIDDLE DRIVE/MARTIN LUTHER KING JR. DRIVE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process.

Current Route Description:
Middle Drive/Martin Luther King Jr. Drive
Stemming off Route 75 (Transverse Drive), Route 34 provides access from the Western half of Golden Gate Park. The route begins on West Drive and connects with the multi-use path on Middle Drive to Martin Luther King Jr. Drive. Cyclists may proceed on Martin Luther King Jr. Drive or divert to Route 30 (JFK Drive to Fulton Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 36: TOWNSEND STREET/DIVISION STREET

Network Improvement Project Location(s):

- Townsend Street, from The Embarcadero to 2nd Street
- Townsend Street, from 2nd Street to 4th Street
- Townsend Street, from 4th Street to Division Street
- Division Street, from Townsend Street to 11th Street

Current Route Description:

Townsend Street is an important route since it serves the Caltrain Depot. Starting at The Embarcadero, the route follows Townsend, Division, and 13th Streets, where it connects with Route 25 (Harrison Street). It continues south two blocks on Harrison Street and west one block on 14th Street to eastbound Route 30 (14th and Folsom Streets).

Generalized Opportunities:

- Townsend Street, from The Embarcadero to 2nd Street
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Townsend Street, from 2nd Street to 4th Street
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
  - The SFCTA has offered to hire a consultant to assist the DPT Bicycle Program. Townsend Street is a recommended project for the SFCTA's consultant to work on. Please refer to the Townsend Street Summary Sheets in Appendix 9a.

- Townsend Street, from 4th Street to Division Street
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
  - DPT applied for Regional Bicycle and Pedestrian Program funds to stripe bike lanes

- Division Street, from Townsend Street to 11th Street
  - The ongoing interest in a conceptual Mission Creek Bikeway could lead to on-road improvements.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

Generalized Constraints:

- Townsend Street, from The Embarcadero to 2nd Street
  - Please refer to the Townsend Street Summary Sheets in Appendix 9a.

- Townsend Street, from 2nd Street to 4th Street
  - Please refer to the Townsend Street Summary Sheets in Appendix 9a.

- Townsend Street, from 4th Street to Division Street
  - Please refer to the Townsend Street Summary Sheets in Appendix 9a.

- Division Street, from Townsend Street to 11th Street
  - This project is located in a commercial district. Any parking changes should consider impacts to adjacent property owners.
  - This project is located along a truck route. Lane widths, truck traffic volumes, and traffic speeds will need to be considered.
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Adjacent property owners and other stake holders need to be consulted. Industrial/ Commercial/ activity creates specific considerations for this corridor. loading docks, driveways, on-street parking impacts need to be considered.
  - This project will involve Caltrans. Project limits fall within Caltrans jurisdiction

Improvement Options:

- Townsend Street, from The Embarcadero to 2nd Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Improve signage and install "Sharrows".

- Townsend Street, from 2nd Street to 4th Street
  - Townsend Street was identified as a "Priority Project" during this planning process. Therefore, there was additional development of conceptual options that received public input and feedback. Taking this into consideration, the SFCTA is pursuing hiring a consultant and an additional staff member to continue work on this project segment. The SFCTA has not made a determination as to which Townsend Street option should be pursued. Since the section of Townsend Street from 2nd to 4th Streets requires the elimination of one travel lane to provide room for bike lanes and Muni has expressed strong concerns, bike lanes on Townsend Street from 2nd to 4th Streets have been separated into a second phase of this project. This has allowed the first phase (bike lanes from 4th to Division

Streets) to proceed at this time (pending receipt of funding). Please refer to the Second Street Summary Sheets in Appendix 9a.

- Townsend Street, from 4th Street to Division Street
  - With support of the BAC and SFBC, DPT applied for funds to design, stripe, and sign bike lanes on Townsend Street from 4th to Division Streets.

- Division Street, from Townsend Street to 11th Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore Striping Bike Lanes.
  - Improve signage and install "Sharrows".

ROUTE 40: OCEAN BEACH TO ILLINOIS STREET (VIA KIRKHAM AND 17TH/16TH STS.)

Network Improvement Project Location(s):

- Seventeenth Street, from Market Street to Kansas Street
- Sixteenth Street, from Kansas Street to Bryant Street
- Kirkham Street, from 6th Avenue to Great Highway
- Kirkham Path, from Lower Great Highway to Great Highway
- Corbett Avenue, from Clayton Street to 17th Street
- Seventeenth Street, from Corbett Avenue to Market Street

Current Route Description:

16th Street/17th Street/Corbett Avenue/Clayton Street/Parnassus Avenue/Kirkham Street

In the eastern portion of Route 40, 17th Streets provides an important connection through the Mission District and to the 16th Street BART Station. Route 40 also utilizes the Sixteenth Street bike lanes to bridge Illinois Street (Route 5) to both Kansas Street (Route 123) and to Mississippi Street (Route 23), which within a few blocks connects with (Route 7), thereby connecting Division, 11th, 5th, and Townsend Streets in the north to the 22nd Street Caltrain Station..

Traveling west, Route 40 continues via Kansas Street, 17th Street, and Corbett Avenue and the Route 50 junction allowing cyclists to turn south toward West Portal and Stern Grove. From Corbett Avenue, Route 40 then continues via Clayton Street, Parnassus Avenue, 6th Avenue, and then down Kirkham Street to Ocean Beach. Kirkham Street provides east-west access to the northern sunset as well as connections to Golden Gate Park and to San Francisco State University via Route 65 (7th Avenue), Route 75 (20th Avenue), Route 85 (34th Avenue), and Route 95 (the Great Highway).

Generalized Opportunities:

- Seventeenth Street, from Market Street to Kansas Street
  - Please refer to the 16th/ 17th Streets Corridor Summary Sheets in Appendix
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Sixteenth Street, from Kansas Street to Bryant Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - The scope of work for the SFCTA Strategic Analysis Report (SAR) for 16th Street Corridor Transportation Issues was approved by SFCTA Board in March 2002. Work on the SAR was on hold, but has resumed and SFCTA staff expect to release it in March 2005. The scope of work includes an analysis of potential transportation improvements that will develop a general paradigm for transportation investment along the corridor, develop preliminary estimates of cost for potential improvements, and analyze funding prospects. The SAR may recommend follow up analyses, and other specific actions. The DPT Bicycle Program has referred SFCTA staff to the work of the Bicycle Plan Update on the 16th Street/17th Street Corridor. Please refer to the 16th/ 17th Streets Corridor Summary Sheets in Appendix 9a.
- Kirkham Street, from 6th Avenue to Great Highway
  - This project is located in both residential and commercial districts. Any parking changes should consider impacts to adjacent property owners.
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Adjacent property owners and other stake holders need to be consulted. Commercial/ Residential activity creates specific considerations for this corridor. Driveways, and on-street parking impacts need to be considered.

- Kirkham Path, from Lower Great Highway to Great Highway
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.

- Corbett Avenue, from Clayton Street to 17th Street
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Seventeenth Street, from Corbett Avenue to Market Street
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Seventeenth Street, from Market Street to Kansas Street
  - Please refer to the 16th/ 17th Streets Corridor Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Sixteenth Street, from Kansas Street to Bryant Street
  - Please refer to the 16th/ 17th Streets Corridor Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Kirkham Street, from 6th Avenue to Great Highway
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
- Kirkham Path, from Lower Great Highway to Great Highway
- Corbett Avenue, from Clayton Street to 17th Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Seventeenth Street, from Corbett Avenue to Market Street
  - Limited right-of-way
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Seventeenth Street, from Market Street to Kansas Street
  - This segment was identified as a Study Area within the Bicycle Plan: Policy Framework.

  - Seventeenth Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: option 1 for Market Street to Harrison Streets, option 2 for Harrison Street to Potrero Avenue, option 1 for Potrero Avenue to Kansas Street.
  - Please refer to the 17th Street Intersection Summary Sheets in Appendix 9a.

- Sixteenth Street, from Kansas Street to Bryant Street
  - This segment was identified as a Study Area within the Bicycle Plan: Policy Framework.
  - Sixteenth Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. However, a lot of work still remains for 16th Street. Option 1 is recommended, which suggests additional study for 16th Street from Market Street to Bryant Street, and bike lanes from Bryant Street to Henry Adams Street. Staff recommends that a comprehensive planning project, similar to that undertaken by the SFCTA for Market Street, be undertaken for 16th Street to determine improvements for all modes, including bicycles.

- Kirkham Street, from 6th Avenue to The Great Highway
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore installing improved signage and "Sharrows"
  - Explore striping bike lanes

- Kirkham Path, from The Lower Great Highway to The Great Highway
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Improve path connection

- Corbett Avenue, from Clayton Street to 17th Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore improving signage and "Sharrows"
  - Explore intersection improvements

- Seventeenth Street, from Corbett Avenue to Market Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore improving signage and "Sharrows"
  - Explore intersection improvements

ROUTE 44: GENERAL HOSPITAL TO UPPER MARKET

Network Improvement Project Location(s):

- Twenty-Second Street , from Chattanooga Street to Potrero Avenue
- Romain Overpass at Market Street

Current Route Description:

22nd Street/Chattanooga Street/Jersey Street/Diamond Street/Eureka Street/Romain Street

This route connects San Francisco General Hospital, the Mission District, Noe Valley and Upper Market. At San Francisco General Hospital at Potrero Avenue (Route 25), a connection can be made from Cesar Chavez Street (Route 60) from the east. From Potrero Avenue, Route 44 follows 22nd, Chattanooga, and Jersey Streets to Noe Valley. The route continues via Diamond, 23rd, Eureka, and 21st Streets, Grand View Avenue, and Romain Streets. The route crosses Market Street via an existing non-motor vehicle over-crossing at Romain Street. The route ends at Corbett Avenue, where cyclists can take Route 55 to the Haight and Richmond (connecting to Route 40 to the Sunset) or Route 50 to West Portal and Stern Grove.

Generalized Opportunities:

- Twenty-Second Street , from Chattanooga Street to Potrero Avenue
  - This is the flattest route to Noe Valley from the Mission Neighborhood
- Romain Overpass at Market Street
  - Provides an auto-free crossing of upper Market Street

Generalized Constraints:

- Twenty-Second Street , from Chattanooga Street to Potrero Avenue
- Romain Street Overpass at Market Street
  - American Disability Act may prevent minor adjustments to this overpass without a complete rebuild
  - Cost to rebuild overpass bridge

Improvement Options:

- Twenty-Second Street , from Chattanooga Street to Potrero Avenue
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore improving signage and "Sharrows"
  - Explore intersection improvements
  - Explore striping bike lanes
- Romain Overpass at Market Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore options to rebuild and improve bridge overpass

ROUTE 45: MARINA TO DALY CITY (VIA VALENCIA STREET & ALEMANY BOULEVARD)

Network Improvement Project Location(s):

- Chenery Street, from 30th Street to Diamond Street

    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Ottawa Avenue, from Alemany Boulevard to Cayuga Avenue
- Cayuga Avenue, from Ottawa Avenue to Still Street
- Alemany Boulevard, from Geneva Avenue to Bayshore Boulevard
- Lyell Street, from Alemany Boulevard to Bosworth Street
- San Jose Avenue, from Randall Street to 29th Street
    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information, go to: www.mtc.ca.gov.
- Thirtieth Street, from Dolores Street to Sanchez Street
- Twenty-ninth Street, from Dolores Street to Sanchez Street
- Dolores Street, from 29th to San Jose Avenue
- McCoppin Bikeway, from Market Street to Valencia Street
- Octavia Boulevard, from McCoppin Bikeway to Hayes Green

Current Route Description:

Steiner Street/Webster Street/Octavia Street/Valencia Street/Chenery Street/Cayuga Avenue/Alemany Boulevard/San Jose Avenue

This route provides the least steep southbound ascent of Pacific Heights and crosses San Francisco to connect the Marina with the Daly City BART Station and San Mateo County It begins as a signed route on Steiner Street at Greenwich Street (Route 6) and continues south through Pacific Heights and the Western Addition, merging with Route 20 (the Turk Street/Golden Gate Avenue one-way couplet). Steiner Street avoids the steep hills between Sutter and Clay Streets. The route continues south via Webster Street (see Route 345 description). To connect to Valencia Street, avoiding hills, the route continues via Fulton Street and Octavia Boulevard. A path, adjacent to the freeway, is being built as part of the Central Freeway/Octavia Boulevard Project that will connect the southern end of Octavia Boulevard to Valencia Street.

Valencia Street provides a connection to the heart of the Mission and Bernal Heights Districts, as it is the first flat street east of Twin Peaks and has bike lanes. South of Route 60 (Cesar Chavez Street), access to the southwest part of the City is via Tiffany Avenue and 29th, Dolores, 30th, Chenery and Diamond Streets. From Diamond Street cyclists can connect with westbound Route 70 (Circular Avenue/Monterey Boulevard) to Saint Francis Wood, Stern Grove, and San Francisco State University, eastbound Route 70 (Silver Avenue) to the Bay View District, or continue on Route 45 to the Daly City BART Station and San Mateo County via Cayuga Avenue, Ottawa Avenue, Alemany Boulevard, and San Jose Avenue.

Generalized Opportunities:

- Chenery Street, from 30th Street to Diamond Street

  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Ottawa Avenue, from Alemany Boulevard to Cayuga Avenue
- Cayuga Avenue, from Ottawa Avenue to Still Street
- Alemany Boulevard, from Geneva Avenue to Bayshore Boulevard
  - Please refer to the Alemany Boulevard Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Lyell Street, from Alemany Boulevard to Bosworth Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- San Jose Avenue, from Randall Street to 29th Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Thirtieth Street, from Dolores Street to Sanchez Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Twenty-ninth Street, from Dolores Street to Sanchez Street
- Dolores Street, from 29th to San Jose Avenue
- McCoppin Bikeway, from Market Street to Valencia Street
  - Will be constructed with as part of the new Freeway touchdown
- Octavia Boulevard, from McCoppin Bikeway to Hayes Green
  - Will be constructed with as part of the new Freeway touchdown

Generalized Constraints:

- Chenery Street, from 30th Street to Diamond Street
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
- Ottawa Avenue, from Alemany Boulevard to Cayuga Avenue
- Cayuga Avenue, from Ottawa Avenue to Still Street
- Alemany Boulevard, from Geneva Avenue to Bayshore Boulevard
  - Please refer to the Alemany Boulevard Summary Sheets in Appendix 9a.
- Lyell Street, from Alemany Boulevard to Bosworth Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- San Jose Avenue, from Randall Street to 29th Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Thirtieth Street, from Dolores Street to Sanchez Street
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Twenty-ninth Street, from Dolores Street to Sanchez Street
  - This project is located in a residential district. Parking changes should consider impacts to adjacent property owners.
- Dolores Street, from 29th to San Jose Avenue
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
- McCoppin Bikeway, from Market Street to Valencia Street
  - DPT is concerned about long term maintenance and user safety of this facility
- Octavia Boulevard, from McCoppin Bikeway to Hayes Green
  - High turning volumes with a design that encourages cyclists to be on the frontage road, rather than on the boulevard.

Improvement Options:

- Chenery Street, from 30th Street to Diamond Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Reclassify Chenery Street as Route 66 to better access the Bernal Heights neighborhood. The Miguel Street bridge is one of the few crossings of the Bernal Cut (San Jose Avenue)
- Ottawa Avenue, from Alemany Boulevard to Cayuga Avenue
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Move Bicycle Route Network and route signs from Ottawa Avenue to Alemany Boulevard
- Cayuga Avenue, from Ottawa Avenue to Still Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Move Route Network and route signs from Cayuga Avenue to Alemany Boulevard
- Alemany Boulevard, from Geneva Avenue to Bayshore Boulevard
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Include

- Lyell Street, from Alemany Boulevard to Bosworth Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- San Jose Avenue, from Randall Street to 29th Street
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
- Thirtieth Street, from Dolores Street to Sanchez Street
- Twenty-ninth Street, from Dolores Street to Sanchez Street
  - This segment has been identified as a potential inclusion to the San Francisco Bicycle Route Network.
- McCoppin Bikeway, from Market Street to Valencia Street
  - Ensure regular maintenance. Explore allowing a left turn from Valencia Street on to Market Street for bicyclists.
- Octavia Boulevard, from McCoppin Bikeway to Hayes Green
  - Explore other alternatives for cyclists than the Octavia Boulevard frontage road.

ROUTE 47: SCOTT STREET/SANCHEZ STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process.

Current Route Description:

Scott Street/ "The Wiggle"/Sanchez Street
Route 47 connects the Western Addition and Eureka Valley neighborhoods. It begins at Route 20 (the Turk Street/Golden Gate Avenue couplet) and continues via Scott, Waller, and Sanchez Streets. The portion of Route 47 south of Oak Street and north of Duboce Avenue is coincident with Route 30 (the "Wiggle"). Route 47 also provides connections to Route 32 (Page Street), Golden Gate Park, and Route 50 (Market Street) to Downtown and the Castro. It ends at Route 40 (17th Street), which provides a connection to the Mission District and Potrero Hill.

Generalized Opportunities:

- This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

ROUTE 49: THE CASTRO TO NOE VALLEY TO SAN JOSE AVENUE

Network Improvement Project Location(s):

- Thirtieth Street, from Chenery Street to Sanchez Street
- Sanchez Street, from 30th Street to 29th Street
- Twenty-ninth Street, from Sanchez Street to Dolores Street
- Church Street, from 29th Street to 30th Street

Current Route Description:

Eureka Street/Jersey Street/Sanchez Street
To connect the Castro, Noe Valley and Bernal Heights neighborhoods, this route uses Eureka, 23rd, Diamond, Jersey, Sanchez, and 30th Streets. In the northbound direction, cyclists are routed from Eureka Street to Corbett Avenue via Market and Douglass Streets because the northernmost block of Eureka Street is one-way southbound. Note that Route 49 is coincident with Route 44 (22nd Street/Chattanooga Street/Jersey Street/Diamond Street/ Eureka Street/Romain Street) between Sanchez Street /Jersey Street intersection and the Eureka Street/21st Street intersection).

Generalized Opportunities:

- Thirty Street, from Chenery Street to Sanchez Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Twenty-ninth Street, from Sanchez Street to Dolores Street
  - Rationalize the Bicycle Route Network around 29th Street, to coincide with potential improvements along San Jose Avenue. Currently, Route 45 turns off of San Jose Ave and on to 29th Street. This portion of 29th Street would remain part of the Bike Route Network, but would change designation to Route 49, extending to Sanchez Street.
- Church Street, from 29th Street to 30th Street
  - Include on the Bicycle Route Network.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Sanchez Street, from 30th Street to 29th Street

Generalized Constraints:

- Thirty Street, from Chenery Street to Sanchez Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance

published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

- Sanchez Street, from 30th Street to 29th Street

- Twenty-ninth Street, from Sanchez Street to Dolores Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

- Church Street, from 29th Street to 30th Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

- Twenty-ninth Street, from Sanchez Street to Dolores Street
  - Include on the Bicycle Route Network as Route 49
- Thirty Street, from Chenery Street to Sanchez Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Remove the Route Network
- Sanchez Street, from 30th Street to 29th Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Remove the Route Network
- Church Street, from 29th Street to 30th Street
  - Include on the Bicycle Route Network.

ROUTE 50: FERRY BUILDING TO GREAT HIGHWAY

Network Improvement Project Location(s):

- Market Street, from Steuart Street to Octavia Boulevard
- Market Street, from Octavia Boulevard to 17th Street
- Portola Drive, from Corbett Avenue to Sloat Boulevard
- Sloat Boulevard, from 19th Avenue to La Playa Street

Current Route Description:
Market Street/17th Street/Corbett Avenue/Portola Drive/Sloat Boulevard

Route 50 begins at Justin Herrman Plaza and follows Market Street up to the intersection of 17th and Castro Streets. In the westbound direction 17th Street is utilized from Castro Street to Corbett Avenue. In the eastbound direction, the route uses Corbett Avenue, 17th Street, and Eureka Street to Market Street because 17th Street is one-way westbound east of Eureka Street.

From Corbett Avenue, the route continues on Portola Drive. Portola Drive provides access to Golden Gate Park via Route 65 (Laguna Honda Boulevard) using Route 60 as a connector. From Portola Drive Route 50 continues to Sloat Boulevard, ending at the Great Highway (Route 95). Sloat Boulevard provides access to San Francisco State University via Route 75 (20th Avenue) and to Lake Merced and western Golden Gate park via Route 85 (34th Avenue).

Eastbound Route 50 cyclists can avoid the complicated triple left turn lane at the intersection of Sloat Boulevard and Portola Drive (Saint Francis Circle) by continuing east onto St. Francis Boulevard and turning left at San Fernando Way (coincident with Route 70) and then right onto Portola Drive.

Generalized Opportunities:

- Market Street, from Steuart Street to Octavia Boulevard
  - Please refer to the SFCTA's Market Street Study on the web at: www.sfcta.org/marketstreet.htm
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Market Street, from Octavia Boulevard to 17th Street
  - Please refer to the Market Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
- Portola Drive, from Corbett Avenue to Sloat Boulevard
  - Please refer to the Portola Drive Summary Sheets in Appendix 9a.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Sloat Boulevard, from 19th Avenue to La Playa Street
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

Generalized Constraints:

- Market Street, from Steuart Street to Octavia Boulevard
  - Please refer to the SFCTA's Market Street Study on the web at: www.sfcta.org/marketstreet.htm
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Adjacent property owners and other stake holders need to be consulted. Market Street is San Francisco's "Main Street"

- Market Street, from Octavia Boulevard to 17th Street
  - Please refer to the Market Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Portola Drive, from Corbett Avenue to Sloat Boulevard
  - Please refer to the Portola Drive Summary Sheets in Appendix 9a.
- Sloat Boulevard, from 19th Avenue to La Playa Street
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This project is located along a transit route and transit vehicle operations will need to be considered. Please consult the San Francisco Bicycle Plan: Policy Framework Document's Bicycle and Transit Policy in Chapter 2 for guidance.
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.

- Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Market Street, from Steuart Street to Octavia Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Please refer to the SFCTA's Market Street Study on the web at: www.sfcta.org/marketstreet.htm
- Market Street, from Octavia Boulevard to 17th Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Market Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommended the treatments that would provide the most continuous bike lanes along this segment of Market Street. Please refer to the Market Street Summary Sheets in Appendix 9a.

- Portola Drive, from Corbett Avenue to Sloat Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Portola Drive was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: option 2 for section A, option 2 for section B, option 2 for section C, option 2 for section D, option 2 for section E, option 1 for section F, option 1 for section G.. Please refer to the Portola Drive Summary Sheets in Appendix 9a.
- Sloat Boulevard, from 19th Avenue to La Playa Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - DPT has obtained grant funds to stripe and sign bike lanes on Sloat Boulevard from The Great Highway to Skyline Boulevard.

ROUTE 55: CRISSY FIELD TO UPPER MARKET STREET AND GLEN PARK BART

Network Improvement Project Location(s):

- Bosworth Street/O'Shaughnessy Boulevard, from San Jose Avenue to Portola Drive

- Masonic Avenue, from Page Street to Geary Boulevard
- O'Shaughnessy Path, from Portola Drive to Bosworth Street
- Presidio Boulevard, from Pacific Avenue to Geary Boulevard

Current Route Description:

Presidio Boulevard & Avenue/Masonic Avenue/Downey Street/ Ashbury Street/Corbett Avenue/Portola Drive/O'Shaughnessy Boulevard

This route provides a connection between the Presidio, the Geary Boulevard shopping district, the Panhandle, Upper Market and Glen Park. Beginning at the intersection of Presidio Boulevard and Lombard Street (Route 4), the route traverses the Presidio, runs between Pacific Heights and Laurel Heights to the Panhandle via Presidio and Masonic Avenues. It connects with Route 10 (Sutter Street/Post Street one-way couplet) to the Financial District and via Route 20 (Turk Street) to the University of San Francisco.

The route continues south on Presidio Avenue and connects with Masonic Avenue at Geary Boulevard. This routing was selected because it avoids the heavily trafficked and channelized intersection of Geary at Masonic. In addition, there is an existing all-way STOP at Presidio Avenue and Geary Boulevard that helps bicyclists cross Geary Boulevard.

From the Panhandle, the route continues via Downey Street (southbound) and Ashbury Street (northbound), Clayton Street, and Corbett Avenue to Portola Drive. Cyclists destined for Stern Grove or Ocean Beach can connect with Route 50 on Portola Drive. Those bound for Saint Francis Wood or San Francisco State University can branch off on Route 65 (Santa Clara Avenue).

Route 55 continues on O'Shaughnessy Boulevard and Bosworth Street, past Glen Canyon Park to the Glen Canyon neighborhood, where access is provided to northbound Route 45 (Chenery Street), southbound Route 45 (Cayuga Avenue), and Route 70 (Hearst Avenue/Monterrey Boulevard).

O'Shaughnessy Boulevard is especially important to cyclists and was included in the route network because it is the only street directly connecting the Glen Park BART Station, the Glen Park shopping district, School of the Arts, Glen Canyon Park, and the Glen Park and Mount Davidson/Twin Peaks neighborhoods. While O'Shaughnessy Boulevard is used by some, generally experienced cyclists, many others to use the sidewalk bicycle path along its north side.

Generalized Opportunities:

- Bosworth Street/O'Shaughnessy Boulevard, from San Jose Avenue to Portola Drive

  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
  - Adjacent property owners and other stake holders need to be consulted. Commercial/ Residential activity creates specific considerations for this corridor. Driveways and on-street parking impacts need to be considered.
  - This project should involve Caltrans
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Masonic Avenue, from Page Street to Geary Boulevard
  - Please refer to the Masonic Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- O'Shaughnessy Path, from Portola Drive to Bosworth Street

Generalized Constraints:

- Bosworth Street/O'Shaughnessy Boulevard, from San Jose Avenue to Portola Drive
  - Traffic volumes are high along this corridor. Impacts to the overall traffic capacity need to be mitigated.
  - This project is located along a transit route and transit vehicle operations will need to be considered. Please consult the San Francisco Bicycle Plan: Policy Framework Document's Bicycle and Transit Policy in Chapter 2 for guidance.
  - This project is located in both residential and commercial districts. Any parking changes should consider impacts to adjacent property owners.
  - Adjacent property owners and other stake holders need to be consulted. Commercial/ Residential] activity creates specific considerations for this corridor. Driveways, on-street parking impacts need to be considered.
  - This project should involve Caltrans

- Masonic Avenue, from Page Street to Geary Boulevard
  - Please refer to the Masonic Street Summary Sheets in Appendix 9a.
- O'Shaughnessy Path, from Portola Drive to Bosworth Street
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.

- Presidio Boulevard, from Pacific Avenue to Geary Boulevard
    - This project is located in both residential and commercial districts. Any parking changes should consider impacts to adjacent property owners.
    - Adjacent property owners and other stake holders need to be consulted. Muni bus yard activity creates specific considerations for this corridor. Driveways, on-street parking impacts need to be considered.

Improvement Options:

- Bosworth Street/O'Shaughnessy Boulevard, from San Jose Avenue to Portola Drive
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - DPT has funds to design improvements to the 1.3-mile bicycle/pedestrian path on the north side of O'Shaughnessy Boulevard (Portola Drive to Elk Street), including replacement of sections of cracked asphalt, a safety shoulder, slurry sealing of entire asphalt section of the path, striping for improved safety, and vegetation pruning for improved visibility. As many path obstacles as possible (such as a MUNI bus shelter and various signs) will be relocated to widen the path's clear space.
- Masonic Avenue, from Page Street to Geary Boulevard
    - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
    - Masonic Avenue was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Public feed back was supportive, but there are still traffic capacity issues that need to be addressed. Staff recommends that a comprehensive planning project, similar to that undertaken by the SFCTA for Market Street, be undertaken for Masonic. Planning efforts should coordinate with SFgo, since Integrated Transportation Management Systems (ITMS) will most likely be a strong component of bicycle facility improvements. Please refer to the Masonic Street Summary Sheets in Appendix 9a.
- O'Shaughnessy Path, from Portola Drive to Bosworth Street
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - DPT has obtained grant funds to design improvements to the 1.3-mile bicycle/pedestrian path/sidewalk on the north side of O'Shaughnessy Boulevard (Portola Drive to Elk Street). This includes replacement of sections of cracked asphalt, slurry sealing of entire asphalt section of the path, striping some sections for improved safety, and significant vegetation pruning for improved visibility well as a safety shoulder. As many path obstacles as possible (such as a MUNI bus shelter and various signs) should be relocated to widen the path's clear space for all users, including cyclists, pedestrians, and the disabled. Some minor path relocation and/or widening of some sections should be considered if necessary.

- Presidio Boulevard, from Pacific Avenue to Geary Boulevard
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.

ROUTE 60: GREAT HIGHWAY TO 3RD STREET (VICENTE STREET/CLIPPER STREET/ CHAVEZ CESAR STREET)

Network Improvement Project Location(s):

- Cesar Chavez Street, from Mississippi Street (I-280) to Kansas Street (US 101)
- Cesar Chavez Street, from Kansas Street (US 101) to Guerrero Street
- Cesar Chavez Street, from Guerrero Street to Sanchez Street
- Woodside Avenue, from Portola Drive to Laguna Honda Boulevard
- Vicente Path, from Lower Great Highway to Great Highway

Current Route Description:
Cesar Chavez Street/Clipper Street/Vicente Street
Route 60 connects Route 5 (Third Street) with Vicente Street, via Cesar Chavez, Sanchez Street, Clipper Street, Laguna Honda Boulevard, Woodside Avenue, and Portola Drive. This crosstown route intersects many north-south routes, offering connections to many parts of the City.

To provide a connection to Vicente Street, Woodside Avenue (westbound), Dewey Boulevard, Taraval Street, Forest Side Avenue, Ulloa Street, and 16th Avenue are used. In the eastbound direction, Laguna Honda Boulevard is used instead of Woodside Avenue since its lower traffic volumes and less steep grade are more suitable for uphill cycling. In addition the left turn at Portola Drive is more easily made from Laguna Honda Boulevard (a T intersection).

West of 16th Avenue, Vicente Street, which serves the Lower Sunset on the north Side of Stern Grove is recommended, since it is flatter than Ulloa Street. It has no street car tracks and less traffic compared to Taraval Street.

Generalized Opportunities:

- Cesar Chavez Street, from Mississippi Street (I-280) to Kansas Street (US 101)
    - DPT applied for Regional Bicycle and Pedestrian Program funds to remove north side parking to provide room to stripe bike lanes
    - Please refer to the Cesar Chavez Street Summary Sheets in Appendix 9a.
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Cesar Chavez Street, from Kansas Street (US 101) to Guerrero Street
    - Please refer to the Cesar Chavez Street Summary Sheets in Appendix 9a.

  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Cesar Chavez Street, from Guerrero Street to Sanchez Street
  - Please refer to the Cesar Chavez Street Summary Sheets in Appendix 9a.

- Woodside Avenue, from Portola Drive to Laguna Honda Boulevard
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Vicente Path, from Lower Great Highway to Great Highway
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.

Generalized Constraints:

- Cesar Chavez Street, from Mississippi Street (I-280) to Kansas Street (US 101)
  - Please refer to the Cesar Chavez Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Cesar Chavez Street, from Kansas Street (US 101) to Guerrero Street
  - Please refer to the Cesar Chavez Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Cesar Chavez Street, from Guerrero Street to Sanchez Street
  - Please refer to the Cesar Chavez Street Summary Sheets in Appendix 9a.

- Woodside Avenue, from Portola Drive to Laguna Honda Boulevard
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.
  - Adjacent property owners and other stake holders need to be consulted. Laguna Honda Hospital activity creates specific considerations for this corridor. Driveways and on-street parking impacts need to be considered.

- Vicente Path, from Lower Great Highway to Great Highway
  - Consult Rec and Park Department

Improvement Options:

- Cesar Chavez Street, from Mississippi Street (I-280) to Kansas Street (US 101)
  - Cesar Chavez Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: option 1 for section A, option 2 for section B (highly dependant on the affect to transit and pedestrians), and option 1 for section C (which DPT has applied for funds for and is implementing with the support of the SFBC and BAC).
  - Please refer to the Cesar Chavez Summary Sheets in Appendix 9a.

- Cesar Chavez Street, from Kansas Street (US 101) to Guerrero Street
  - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
  - Cesar Chavez Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: option 1 for section A, option 2 for section B (highly dependant on the affect to transit and pedestrians), and option 1 for section C (which DPT has applied for funds for and is implementing with the support of the SFBC and BAC).
  - Please refer to the Cesar Chavez Summary Sheets in Appendix 9a.

- Cesar Chavez Street, from Guerrero Street to Sanchez Street
  - This potential project was identified as a Study Area within the Bicycle Plan: Policy Framework.
  - Cesar Chavez Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends: option 1 for section A, option 2 for section B (highly dependant on the affect to transit and pedestrians), and option 1 for section C (which DPT has applied for funds for and is implementing with the support of the SFBC and BAC).
  - Please refer to the Cesar Chavez Summary Sheets in Appendix 9a.

- Woodside Avenue, from Portola Drive to Laguna Honda Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.

- Vicente Path, from Lower Great Highway to Great Highway
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.

- Laguna Honda Boulevard, from Portola Drive to Woodside Avenue

- This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- DPT has obtained grant funds to stripe and sign bike lanes on Laguna Honda Boulevard from Portola Drive to Woodside Avenue.

ROUTE 61: ARGUELLO BOULEVARD/SHERIDAN AVENUE (IN THE PRESIDIO)

Network Improvement Project Location(s):
Please refer to the *Presidio Trust Master Plan* and the Presidio Trust's *Trails and Bikeways Master Plan* available on the web at:
www.presidio.gov/TrustManagement/TrustDocuments/EnvironmentalPlans/

Current Route Description:
Arguello Boulevard and Sheridan Avenue are the bicycle routes in the Presidio to connect Route 4 (Lincoln Boulevard) and Route 65 (Washington Boulevard).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 65: THE PRESIDIO/GOLDEN GATE PARK/LAGUNA HONDA HOSPITAL/WEST PORTAL/JUNIPERO SERRA BOULEVARD

Network Improvement Project Location(s):

- Seventh Avenue, from Kirkham Street to Lawton Street
- Fifth Avenue Path, from Martin Luther King Jr. Drive to Lincoln Way
- Conservatory Drive West, from Arguello Boulevard to JFK Drive
- Laguna Honda Boulevard, from Plaza Street to Dewey Boulevard

Current Route Description:
Washington Boulevard/Arguello Boulevard/7th Avenue/Laguna Honda Boulevard/Dewey Boulevard/Santa Clara Avenue
Route 65 will provides a route parallel to and east of Route 75 (23rd Avenue/20th Avenue) to SF State University. From Lincoln Boulevard (Routes 2 and 95) in the Presidio, the southbound route is via Ralston, Greenough, and Kobbe Avenues, Harrison Boulevard to Washington Boulevard. The northbound route within the Presidio follows Arguello, Washington, and Lincoln Boulevards, to Merchant Road and through the toll plaza undercrossing.

Heading southbound, Route 65 continues via Washington and Arguello Boulevards, then Conservatory Drive (in Golden Gate Park), connecting the Golden Gate Bridge and Golden Gate Park.

In the park, the route continues via Bowling Green Drive and exits via a short path to Lincoln Way at 5th Avenue. The route continues on Hugo Street, then south on 6th Avenue. At Parnassus Avenue, Route 40 takes bicyclists east to the UC Medical Center, the Castro, Mission, and Potrero Hill. From 6th Avenue Route 65 jogs west on Kirkham Street, and continues south on 7th Avenue. The route continues via Laguna Honda Boulevard, Dewey Boulevard, Claremont Boulevard, jogs on Portola Drive to Santa Clara Avenue, jogs on Monterey Boulevard to San Benito Way, jogs on Ocean Avenue to Cerritos Avenue, and ends at Route 75 (Lunado Way) at Mercedes and Lunado Ways. It provides access to San Francisco State University from the Haight, areas north of the Haight and the inner Richmond.

Generalized Opportunities:

- Seventh Avenue, from Kirkham Street to Lawton Street
    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
    - DPT Livable Streets will do a traffic calming study of the 7th Avenue Corridor within the next five years that could consider bike lanes on 7th Avenue between Lawton Street and Lincoln Way.

- Fifth Avenue Path, from Martin Luther King Jr. Drive to Lincoln Boulevard
    - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.
    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.
    - This project should involve Department of Recreation and Park

- Conservatory Drive West, from Arguello Boulevard to JFK Drive
    - This project should involve Department of Recreation and Park
    - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Laguna Honda Boulevard, from Plaza Street to Dewey Boulevard
    - Please refer to the Laguna Honda Boulevard Summary Sheets in Appendix 9a.
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

Generalized Constraints:

- Seventh Avenue, from Kirkham Street to Lawton Street
  - There is not sufficient width on 7th Avenue to Stripe bike lanes without removal of a traffic lane or parking.
- Fifth Avenue Path, from Martin Luther King Jr. Drive to Lincoln Boulevard
  - Golden Gate Park Master Plan
- Conservatory Drive West, from Arguello Boulevard to JFK Drive
  - Golden Gate Park Master Plan
- Laguna Honda Boulevard, from Plaza Street to Dewey Boulevard
  - Please refer to the Laguna Honda Boulevard Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

- Seventh Avenue, from Kirkham Street to Lawton Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Depending on the outcome of Livable Streets' traffic calming study, bike lanes may be able to be striped on all or part of Seventh Avenue between Lawton Street and Lincoln Way.
  - If bike lanes cannot be striped, Shared Lane Pavement Markings "Sharrows" should be installed.
- Fifth Avenue Path, from Martin Luther King Jr. Drive to Lincoln Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- Conservatory Drive East, from Arguello Boulevard to JFK Drive
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Conservatory Drive East, a one-way northbound street, is part of northbound Bicycle Route 65 that connects Arguello Boulevard to the Panhandle Path. A southbound 0.3 miles contra-flow bike lane (separated by a double-yellow line) can be striped and signed without reducing travel lanes as the necessary width for this bike lane currently exists and there is no parking on its side of the street. It shortens the southbound bicycle trip distance by approximately 0.3 mile as compared to the current route via Conservatory Drive West and JFK Drive. It would also improve safety as some cyclists now ride the wrong way on one-way Conservatory Drive East. DPT has obtained grant funds for this project.

- Laguna Honda Boulevard, from Plaza Street to Dewey Boulevard
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - Laguna Honda Boulevard was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff has applied for and obtained funds to develop PS&Es to increase the width of Laguna Honda Boulevard to improve conditions for bicycles, while maintaining the left turn pocket into the hospital.
    - Construction Estimates will be generated from the PS&Es

ROUTE 66: FARMER'S MARKET/BERNAL HEIGHTS

Network Improvement Project Location(s):

No new network improvements were identified in the 2004 Planning Process.

Current Route Description:

Route 66 accesses the popular Alemany Farmer's Market. Branching off Route 45, it continues via Richland Avenue, Lesse Street and Crescent Avenue, providing this much needed connection.

Generalized Opportunities:

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

- Although the 1997 proposes this route as a dead end route, there is an opportunity to extend the route into Bernal Heights

Generalized Constraints:

- Topography of Bernal Heights
- Narrow lane widths
- Muni Route
- Commercial Parking
- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

- Extend Route 66 along Peralta Avenue to Cortland Avenue. Southbound cyclists would turn left on to Mission Street (signalized intersection), right on Santa Marina Street, and right again on to the proposed San Jose Bike Lanes.

ROUTE 68: EVANS AVENUE

Network Improvement Project Location(s):

- Evans Street, from 3rd Street to Cesar Chavez Street

Current Route Description:

Until general access is permitted to the Hunters Point Naval Shipyard site, Route 68 will begin at the gate at Innes Avenue and Donahue Street.

Outside the shipyard, the Route follows Innes Avenue, Hunters Point Boulevard, and Evans Avenue reaching Route 60 (Cesar Chavez Street). Route 7 (Phelps Street) is a major connector between Route 68 and route 70 (Palou Avenue).

Generalized Opportunities:

- Evans Street, from 3rd Street to Cesar Chavez Street
  - This route will serve future development of the Hunters Point Naval Shipyard site. Given its potential for redevelopment, it is extremely important to plan for good bicycle access and to incorporate needed improvements into the required transportation infrastructure. Route 68 will eventually form a loop through the shipyard site by connecting with Route 70.
  - Coordination with the Bay Trail Project
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Generalized Constraints:

- Evans Street, from 3rd Street to Cesar Chavez Street
  - Care needs to be taken to minimize potential truck-bicycle conflicts on Evans Avenue and further study is needed to determine whether potential truck-bicycle conflicts can be adequately minimized on this route.

Improvement Options:

- Evans Street, from 3rd Street to Cesar Chavez Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Stripe Bike Lanes between 3rd and Cesar Chavez Streets
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

ROUTE 69: BATTERY CAULFIELD ROAD/15TH AVENUE/FUNSTON AVENUE

Network Improvement Project Location(s):

No new network improvements were identified in the 2004 Planning Process.

Current Route Description:

This route provides a connection between Route 65 (Washington Boulevard) in the Presidio and Route 30 (JFK Drive in Golden Gate Park). From Washington Boulevard in the Presidio, this route follows Battery Caulfield Road, Wedemeyer Street, 15th Avenue, Cabrillo Street, Funston Avenue, and the existing path in Golden Gate Park. This route serves the Inner Richmond District by providing access to both San Francisco State University via Route 75 (20th Avenue) and to the Golden Gate Bridge and Marin County via Route 65.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 70: HUNTER'S POINT TO EXCELSIOR (VIA SILVER AVE.) TO GLEN PARK TO WEST PORTAL

Network Improvement Project Location(s):

- Monterey Boulevard , from San Jose Avenue to Junipero Serra Boulevard
- Silver Avenue, from Alemany Boulevard to Oakdale Avenue
- Palou Avenue, from 3rd Street to Phelps Street
- Phelps Street, from Oakdale Avenue to Palou Avenue

Current Route Description:

Palou Avenue/Silver Avenue/Hearst Avenue/Monterey Boulevard
Until general access to the shipyard site is opened along this route, Route 70 starts at Griffith Street. It continues via Palou Avenue, jogging onto Oakdale Avenue via Phelps Street and then continuing southeast via Silver Avenue. Connections are provided to Route 7 (Keith Street/Palou Avenue/Phelps Street), Route 5 (Third Street), Route 170 (Oakdale Avenue), Route 25 (Bayshore Boulevard), and Route 45 (Cayuga Avenue). It provides access for the residents of Bayview and Hunters Point to the shipyard site, Glen Park BART Station, City College, and the West Portal District.

At Cayuga Avenue, this route is coincident with Route 45 to Diamond Street in Glen Park, where it intersects Route 55 (Bosworth Street/O'Shaughnessy Boulevard). The route continues via Circular and Hearst Avenues to Gennessee Street. City College is served by connecting Route 770 (Gennessee Street/Phelan Avenue). Route 70 then continues as a signed Class III route via Monterey Boulevard, Santa Clara Avenue, and Saint Francis Boulevard to Saint Francis Circle. From the Saint Francis Wood area, cyclists can access northeast/west Route 50 (Portola Drive/Sloat Boulevard) and north/south Route 65 (Santa Clara Avenue).

Generalized Opportunities:

- Monterey Boulevard , from San Jose Avenue to Junipero Serra Boulevard
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Silver Avenue, from Alemany Boulevard to Oakdale Avenue

  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Palou Avenue, from 3rd Street to Phelps Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

  - Coincident with the Bay Trail Project
- Phelps Street, from Oakdale Avenue to Palou Avenue
  - Coincident with the Bay Trail Project
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Monterey Boulevard , from San Jose Avenue to Junipero Serra Boulevard
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Silver Avenue, from Alemany Boulevard to Oakdale Avenue
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Palou Avenue, from 3rd Street to Phelps Street
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Phelps Street, from Oakdale Avenue to Palou Avenue

- This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Monterey Boulevard , from San Jose Avenue to Junipero Serra Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- Silver Avenue, from Alemany Boulevard to Oakdale Avenue
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
- Palou Avenue, from 3rd Street to Phelps Street
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Explore striping Bike Lanes
- Phelps Street, from Oakdale Avenue to Palou Avenue
  - This segment was identified as a recommended change to the existing Bicycle Route Network within the Bicycle Plan: Policy Framework.
  - Explore striping Bike Lanes

ROUTE 75: SEACLIFF TO GGP TO STERN GROVE TO DALY CITY BART

Network Improvement Project Location(s):

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way
- Buckingham Way, from 19th Avenue to 20th Avenue
- Twentieth Street, from Sloat Boulevard to Buckingham Way
- Twentieth Street, from Wawona Street to Lincoln Way

Current Route Description:
25th Avenue/23rd Avenue/Transverse Drive/20th Avenue/ Lunado Way/Beverly Street/Daly City BART Station

This route serves the Richmond District, Golden Gate Park, Inner Sunset, Parkside, Stern Grove, San Francisco State University (SFSU), Ingleside, and the Daly City BART Station. A spur, Route 775 (San Francisco State University), provides a connection to SFSU.

Beginning with bike lanes on 25th Avenue between El Camino del Mar and Lake Street, the route jogs east via the Lake Street bike lanes, then south via 23rd Avenue. The route jogs east on Fulton Street and south into Golden Gate park via a new path constructed in 2001. It continues via Transverse Drive to a rehabilitated path connecting to 20th Avenue at Lincoln Way, where a traffic signal was installed to facilitate cyclists crossing Lincoln Way. Twentieth Avenue is recommended since 23rd Avenue is not a through

street south of Sloat Boulevard. Twentieth Avenue is preferred to 19th Avenue since it has much less traffic but is just as direct. However, 20th Avenue has many two-way STOP signs. Traffic calming techniques could be pursued to reduce the number of stops along 20th Avenue.

For travel through Stern Grove, the existing path was rehabilitated and modifications were made to the north gate for round the clock access. The southbound route continues west on Sloat Boulevard, south on 21st Avenue (either from the left lane or using the crosswalk), and east on Ocean Avenue to 20th Avenue. The northbound from continues on 20th Avenue, then east on Sloat Boulevard, accessing the Stern Grove path by crossing Sloat Boulevard at 19th Avenue using the west crosswalk.

The route continues couth via 20th Avenue, through the Stonestown Shopping Center, east on Winston Drive and Mercedes Way, south on Lunado Way, Beverly Street, 19th Avenue, and Saint Charles Avenue. In 2002 major improvements were made to the two paths connecting the two dead-end segments of Saint Charles Avenue to Brotherhood Way and a traffic signal was installed to facilitate cyclists crossing Brotherhood Way, thus providing a much more direct bicycle route south along Saint Charles Avenue to the Daly City BART Station.

Generalized Opportunities:

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way
  - Please refer to the 19th Avenue Summary Sheets in Appendix 9a.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
- Buckingham Way, from 19th Avenue to 20th Avenue
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Twentieth Street, from Buckingham Way to Sloat Boulevard
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Twentieth Street, from Wawona Street to Lincoln Way
  - Identified within the Metropolitan Transportation Commission (MTC) Regional Bicycle Plan
  - Impacts on pedestrians, especially on senior citizens and people with mobility impairments, should be considered. Bicycle improvements along this corridor could potentially improve pedestrian safety.

- This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

Generalized Constraints:

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way
  - Please refer to the 19th Avenue Summary Sheets in Appendix 9a.
- Buckingham Way, from 19th Avenue to 20th Avenue
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework
- Twentieth Street, from Wawona Street to Lincoln Way
  - This project is located in a residential district. Any parking changes should consider impacts to adjacent property owners.

Improvement Options:

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Nineteenth Avenue was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Taking this into consideration, staff recommends option 2, PS&Es should be developed for this option
- Twentieth Avenue, from Wawona Street to Irving Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore striping bike lanes.
- Buckingham Way, from 19th Avenue to 20th Avenue
  -

ROUTE 84: OCEAN AVENUE

Network Improvement Project Location(s):

- Ocean Avenue, from Mission Street to Junipero Serra Boulevard

Current Route Description:

This route serves as a connection between the Excelsior District and Stern Grove. From Route 45 (Cayuga Avenue), Ocean Avenue provides access to the Balboa Park BART Station and to Route 50 (Sloat Boulevard), via Route 75 (20th Avenue). Route 84 east of Phelan Avenue provides a more direct connection to northbound Route 45 than Geneva Avenue (Route 90). However, Ocean Avenue is a desirable route because in combination with Geneva Avenue (Route 90) it forms a direct link between the southeast part of the City and Stern Grove.

Generalized Opportunities:

- Ocean Avenue, from Mission Street to Junipero Serra Boulevard
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

Generalized Constraints:

- Ocean Avenue, from Mission Street to Junipero Serra Boulevard
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Ocean Avenue, from Mission Street to Junipero Serra Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.

ROUTE 85: LEGION OF HONOR DRIVE/34TH AVENUE/LAKE MERCED BOULEVARD

Network Improvement Project Location(s):

- Thirty-Fourth Avenue Path, from Polo Field Path to Lincoln Way
- Sunset Path, from Ocean Avenue to Lake Merced Boulevard
- Lake Merced Boulevard, from Skyline Boulevard to John Muir Drive
- Polo Field Path, from Polo Field to 34th Avenue Path

Current Route Description:
This route connects Sea Cliff, Lincoln Park, outer Richmond, Golden Gate Park, Sunset, Parkside, Lake Merced neighborhoods, and San Mateo County, via 34th Avenue and Lake Merced Boulevard. It begins along Legion of Honor Drive at Route 95 (El Camino del Mar) in Lincoln Park and continues on 34th Avenue.

Route 85 jogs to 36th Avenue at Cabrillo Street (Route 20). From 36th Avenue it is a signed route to Route 30 (JFK Drive in Golden Gate Park). It continues south through the park via the north access road to the Polo Field, the Polo Field bicycle track, and a path to Lincoln Way and 34th Avenue. It connects to the Sunset Boulevard path under crossing of Lincoln Way, and Irving Street to 34th Avenue.

Thirty-fourth Avenue and Clearfield Drive should be designated as Bicycle Priority Streets between Lincoln Way and Lake Merced Boulevard.
Between Vicente and Yorba Streets, 34th Avenue becomes one-way southbound. Therefore, the northbound route jogs on Yorba Street and travels on 35th Avenue to Vicente Street then rejoins 34th Avenue. The route continues via 34th Avenue and Clearfield Drive.

From the intersection of Clearfield Drive and Ocean Avenue to Lake Merced Boulevard at Middlefield Drive, the recommended southbound route is Ocean Avenue, the path just west of Sunset Boulevard, and Lake Merced Boulevard. The northbound route is Middlefield Drive, Gellert Drive, and Clearfield Drive. The path west of Sunset Boulevard provides access to either Lake Merced Boulevard or the adjacent multi-use path around Lake Merced (Route 885).

Generalized Opportunities:

- Thirty-Fourth Avenue Path, from Polo Field Path to Lincoln Boulevard
  - Consult Rec and Park Department and the Golden Gate Park Master Plan
- Sunset Path, from Ocean Avenue to Lake Merced Boulevard
  - Consult Rec and Park Department and the Golden Gate Park Master Plan
- Lake Merced Boulevard, from Skyline Boulevard to John Muir Drive
  - Consult Rec and Park Department and the Golden Gate Park Master Plan
- Polo Field Path, from Polo Field to 34th Avenue Path
  - Consult Rec and Park Department and the Golden Gate Park Master Plan

Generalized Constraints:

- Thirty-Fourth Avenue Path, from Polo Field Path to Lincoln Boulevard
  - Consult Rec and Park Department and the Golden Gate Park Master Plan
- Sunset Path, from Ocean Avenue to Lake Merced Boulevard
  - Consult Rec and Park Department and the Golden Gate Park Master Plan
- Lake Merced Boulevard, from Skyline Boulevard to John Muir Drive
  - Consult Rec and Park Department and the Golden Gate Park Master Plan
- Polo Field Path, from Polo Field to 34th Avenue Path
  - Consult Rec and Park Department and the Golden Gate Park Master Plan

Improvement Options:

- Thirty-Fourth Avenue Path, from Polo Field Path to Lincoln Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework, consult with Rec and Park Staff to proceed with resurfacing, striping, and signage
- Sunset Path, from Ocean Avenue to Lake Merced Boulevard
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework, consult with Rec and Park Staff to proceed with resurfacing, striping, and signage
- Lake Merced Boulevard, from Skyline Boulevard to John Muir Drive

  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework, consult with Rec and Park Staff to proceed with resurfacing, striping, and signage
- Polo Field Path, from Polo Field to 34th Avenue Path
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework, consult with Rec and Park Staff to proceed with resurfacing, striping, and signage

ROUTE 86: WINSTON DRIVE/LAKE MERCED BOULEVARD

Network Improvement Project Location(s):

- Winston Drive, from Junipero Serra Boulevard to Lake Merced

Current Route Description:

This route connects Route 84 (Ocean Avenue) and Route 91 (John Muir Drive/Skyline Boulevard). It provides access to San Francisco State University, the Stonestown Shopping Center, and Lake Merced. Although there are several MUNI bus routes and the traffic can be heavy on the portion of Winston Drive through the Stonestown Shopping Center, this route also provides direct access to this major destination. The route runs from Ocean Avenue via Cedro Avenue, Mercedes Way, Winston Drive, and Lake Merced Boulevard, to Skyline Boulevard (Route 91). At Lunado Way, the Ingleside District to the south and the Daly City BART Station are accessible via Route 75 (Lunado Way and Beverly Street). At Lake Merced Boulevard, connections can be made with Route 85 south to San Mateo County and north to the Sunset and Richmond districts.

Generalized Opportunities:

- Winston Drive, from Junipero Serra Boulevard to Lake Merced
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Generalized Constraints:

- Winston Drive, from Junipero Serra Boulevard to Lake Merced
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

- Winston Drive, from Junipero Serra Boulevard to Lake Merced
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Improve Bicycle Route Signage
  - Explore striping bike lanes.
  - Explore installing Shared Lane Pavement Markings "Sharrows"

ROUTE 90: LAKE MERCED/CITY COLLEGE/COW PALACE

Network Improvement Project Location(s):

- Geneva Avenue, from Paris Street to Ocean Avenue
- Holloway Avenue, from 19th Avenue to Plymouth Street Avenue
- Plymouth Avenue, from Ocean Avenue to Holloway Avenue

Current Route Description:

Beginning at Route 5 (Bayshore Boulevard/Third Street/The Embarcadero) in San Mateo County, this route runs along Geneva, Harold, and Holloway Avenues, and Font Boulevard. This provides an important route connecting the Balboa Park BART Station with San Francisco State University. Font Boulevard connects this route to Lake Merced Boulevard (Routes 85 and 885). Plymouth Avenue connects Holloway and Ocean Avenues because there is a left-turn prohibition from westbound Ocean Avenue to southbound Harold Avenue. In addition, there are no painted crosswalks at the Harold Avenue/Ocean Avenue intersection. The corresponding left from Ocean to Plymouth Avenues is more easily made since there is a traffic signal at this intersection.

A short spur (Route 990) provides direct access to City College from Geneva Avenue. See Route 990.

Generalized Opportunities:

- Geneva Avenue, from Paris Street to Ocean Avenue
  - Since a portion of this route (as well as portions of Routes 5, 805, 905, 45, 75, 85, and 95) extend into San Mateo County, San Francisco should work with the cities of Daly City and Brisbane to make arrangements for signing these routes within the northern parts of those cities to better direct cyclists.
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Holloway Avenue, from 19th Avenue to Plymouth Avenue
  - Connects San Francisco State College and San Francisco State College
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

- Plymouth Avenue, from Ocean Avenue to Holloway Avenue
    - Connects San Francisco State College and San Francisco State College
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Generalized Constraints:

- Geneva Avenue, from Paris Street to Ocean Avenue
    - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Holloway Avenue, from 19th Avenue to Plymouth Avenue
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

- Plymouth Avenue, from Ocean Avenue to Holloway Avenue
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

- Geneva Avenue, from Paris Street to Ocean Avenue
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - Improve Bicycle Route Signage
    - Explore striping bike lanes.
    - Explore installing Shared Lane Pavement Markings "Sharrows"
- Holloway Avenue, from 19th Avenue to Plymouth Avenue
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - Improve Bicycle Route Signage
    - Explore striping bike lanes.
    - Explore installing Shared Lane Pavement Markings "Sharrows"
- Plymouth Avenue, from Ocean Avenue to Holloway Avenue
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
    - Improve Bicycle Route Signage
    - Explore striping bike lanes.
    - Explore installing Shared Lane Pavement Markings "Sharrows"

ROUTE 91: SKYLINE BOULEVARD/JOHN MUIR DRIVE

Network Improvement Project Location(s):

- Lake Merced Path, entire path around Lake Merced

Current Route Description:

This route serves the south and west sides of Lake Merced. It connects Route 50 (Sloat Boulevard) with Route 85 (Lake Merced Boulevard) at the San Mateo County Line. It also provides a connection with Route 95 (Skyline Boulevard/The Great Highway).

Route 91 is a signed route on Skyline Boulevard and John Muir Drive. As an alternative to this on-street route south of Lake Merced Boulevard, cyclists can use the paved path along Lake Merced.

Generalized Opportunities:

- Lake Merced Path, entire path around Lake Merced
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Generalized Constraints:

- Lake Merced Path, entire path around Lake Merced
    - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

- Lake Merced Path, entire path around Lake Merced
    - This segment was recommended for improvements within the Bicycle Plan: Policy Framework, consult with Rec and Park Staff to proceed with resurfacing, striping, and signage

ROUTE 95: LINCOLN BOULEVARD/EL CAMINO DEL MAR/GREAT HIGHWAY/SKYLINE BOULEVARD

Network Improvement Project Location(s):

- Point Lobos Avenue, from Great Highway to 48th Avenue
- Great Highway, from Balboa Street to Point Lobos Avenue

Current Route Description:

This major route crosses San Francisco from the Golden Gate Bridge to San Mateo County. It connects the Presidio, Sea Cliff, Outer Richmond, Golden Gate Park, Outer

Sunset, Parkside, and Lake Merced. In addition it is also the San Francisco portion of the Pacific Coast Bicycle Route (a state marked route along the Pacific Coast from Oregon to Mexico), providing connections to Marin County and points north and San Mateo County and points south.

Beginning the Golden Gate Bridge, this route continues via the undercrossing of the toll plaza, Merchant Road and Lincoln Boulevard, El Camino del Mar, Route 10 (30th Avenue/Clement Street/Seal Rock Drive) to the western section of El Camino del Mar, and Point Lobos Avenue to the Great Highway.

The Great Highway offers two routes for cyclists to choose from: an on-street route on the roadway of the Great Highway and a parallel multi-use path between the roadway and the beach. The on-street route is popular with many cyclists due to its location and wide shoulders. It carries high traffic volumes and fast traffic. Sand blown onto the roadway is frequently a problem, causing the road to be closed periodically. Sand build-up is a particular problem on the west side in the area provided for pedestrians (or bicyclists) to wait to cross at the signalized intersections. The adjacent multi-use path is slow and narrow, but is suitable for leisurely cyclists whose purpose is primarily to ride near the ocean.
The route continues to San Mateo County via Skyline Boulevard (State Highway 35). Highway 35 has wide paved shoulders.

Generalized Opportunities:

- Point Lobos Avenue, from Great Highway to 48th Avenue
  - National Park Service and the Cliff House Restoration
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

- Great Highway, from Balboa Street to Point Lobos Avenue
  - National Park Service and the Cliff House Restoration
  - This bicycle facility is identified as part of the Regional Bikeway System within the MTC Regional Bicycle Plan. For more information: www.mtc.ca.gov.

Generalized Constraints:

- Point Lobos Avenue, from Great Highway to 48th Avenue
  - Narrow Lane Widths
  - This bicycle facility is located on both a Muni route and a Transit Preferential Street (TPS). Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

- Great Highway, from Balboa Street to Point Lobos Avenue
  - Narrow Lane Widths
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

- Point Lobos Avenue, from Great Highway to 48th Avenue
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Improved Uphill (north bound) shoulder
  - Explore Potential northbound bike lane
- Great Highway, from Balboa Street to Point Lobos Avenue
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Improved Uphill (north bound) shoulder
  - Explore Potential northbound bike lane

ROUTE 98: SAGAMORE STREET/BROTHERHOOD WAY

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process.

Current Route Description:
Route 98 provides a connection between the Excelsior and Ingleside Districts and access between Route 45 (Alemany Boulevard) and Route 75 (Beverley Street), thereby providing access to SFSU, the San Francisco Golf Club, and Lake Merced.

Generalized Opportunities:

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Generalized Constraints:

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework

Improvement Options:

ROUTE 106: MARINA (OCTAVIA STREET)

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process.

Current Route Description:

This route connects Route 6 (Greenwich Street/Octavia Street) with 4 (Francisco Street) via Octavia Street. Route 106 provides a connection between Cow Hollow and the Fisherman's Wharf Area. It should receive traffic calming treatment, as recommended for the portions of Routes 4 and 6 that it connects.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 123: KANSAS STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:

This route connects Route 23 (7th Street/8th Street) and Route 36 (Townsend Street/13th Street) with Route 40 (17th Street), which in turn, connects with Route 25 (Potrero Avenue). It provides access to Potrero Hill from the Civic Center and the CalTrain Depot (via Townsend Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 125: ELEVENTH STREET (SOUTHBOUND - BETWEEN MARKET AND HOWARD STREETS)

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:

This is a two block connector between eastbound Route 50 (Market Street) and southbound Route 25 (11th Street) or eastbound Route 30 (Howard Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 134: MIDDLE DRIVE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Southbound cyclists on Route 75 (Transverse Drive) who wish to connect to Route 34 (Middle Drive/Martin Luther King Jr. Drive) can access the Middle Drive Multi-use Path directly without having to use West Drive.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 130: BAKER STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This route provides access between the Panhandle Path (Route 30) and Page Street (Route 32). It also provides a more direct routing for Route 30 ("Wiggle") cyclists to connect with the Panhandle Path without out of the way travel via Hayes Street (temporary Route 30).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 165: JACKSON STREET/CHERRY STREET

Network Improvement Project Location(s):

No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Route 165 provides southbound cyclists on Route 65 (Presidio Avenue) a short-cut to the Pacific Heights and Marina Districts. The route begins off of Route 65 on to Jackson Street and then on to Cherry Street, where a connection is established to Route 10 (Clay Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 170: OAKDALE AVENUE

Network Improvement Project Location(s):

- Oakdale, from Bayshore Boulevard to 3rd Street

Current Route Description:
This route will serve as a connector between Bayview and Bayshore Boulevard. It begins at Route 70 (Silver Avenue/Oakdale Avenue) at Quint Street and continues via Oakdale Avenue to Route 25 (Bayshore Boulevard).

Generalized Opportunities:

- Oakdale, from Bayshore Boulevard to 3rd Street
  - Please refer to the Oakdale Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Oakdale, from Bayshore Boulevard to 3rd Street
  - Please refer to the Oakdale Street Summary Sheets in Appendix 9a.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Oakdale, from Bayshore Boulevard to 3rd Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Oakdale Street was identified as a "Priority Project", therefore during the planning process there was additional development of conceptual options that received public input and feedback. Please refer to the Oakdale Street Summary Sheets in Appendix 9a.

- DPT has obtained grant funds for Design, Engineering, and Construction have been obtained to stripe and sign new bike lanes on Oakdale Avenue from Bayshore Boulevard to Selby Street.

ROUTE 195: KOBBE AVENUE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This is a one block connector between Route 95 (Lincoln Boulevard) and Route 65 (Washington Boulevard).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 198: GOETHE STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Route 198 provides a direct route to San Jose Avenue (Route 45) from eastbound Route 98 (Brotherhood Way) via Goethe Street. Route 198 connects the Sunset District to San Jose Avenue and Mission Street in Daly City.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 202: PRESIDIO (BATTERY EAST ROAD MULTI-USE PATH)

Network Improvement Project Location(s):

- Battery East Path, from Lincoln Boulevard to Golden Gate Bridge

Current Route Description:

This route connects Route 2 (Lincoln Boulevard) and the Golden Gate Bridge walkways (Route 95) via a multi-use path along Battery East Road. It provides an alternative to cycling through the Golden Gate Bridge parking lot roadway (Routes 295).

Generalized Opportunities:

- Battery East Path, from Lincoln Boulevard to Golden Gate Bridge
  - Presidio Trails and Bikeways Master Plan at http://www.nps.gov/goga/admin/planning/trails_bikeways/index.htmidentifies this segment for improvements

Generalized Constraints:

- Battery East Path, from Lincoln Boulevard to Golden Gate Bridge
  - Within the jurisdiction of the National Park Service and the Presidio Trust

Improvement Options:

- Battery East Path, from Lincoln Boulevard to Golden Gate Bridge
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Explore improving path
  - Explore uphill bike lane

ROUTE 210: BROADWAY TUNNEL

Network Improvement Project Location(s):

- Broadway Tunnel - entire length – Larkin to Powell Streets

Current Route Description:

This spur route, for experienced cyclists only, follows Broadway through the tunnel between Mason and Polk Streets. This route provides direct access across the City from The Embarcadero to the Cliff House. Beginning at The Embarcadero (Route 5).

Generalized Opportunities:

- Broadway Tunnel - entire length – Larkin to Powell Streets
  - Please refer to the Broadway Tunnel Summary Sheets in Appendix 9a.

Generalized Constraints:

- Broadway Tunnel - entire length – Larkin to Powell Streets
  - Please refer to the Broadway Tunnel Summary Sheets in Appendix 9a.

Improvement Options:

- Broadway Tunnel - entire length – Larkin to Powell Streets
  - The Broadway Tunnel was identified as a "Priority Project" and, therefore, during the planning process, was explored further with public input and feedback received on the various options developed. Staff recommends Option 1 for a short term option for the tunnel. Public

comments cited Option 4 as desirable. Although Option 4 should also be pursued, it should be noted that Option 4 has significant cost issues and it also may not adequately address some pedestrian and ADA concerns. Please refer to the Broadway Tunnel Summary Sheets in Appendix.

ROUTE 234: MCCLAIN'S BEND

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Provide access from Route 34 (Martin Luther King Jr. Drive) to Route 30 (JFK Drive.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 295: GOLDEN GATE BRIDGE PARKING LOT ROADWAY

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This route connects Route 2 (Lincoln Boulevard) and the Golden Gate Bridge walkways (Route 95) via the Golden Gate Bridge parking lot roadway.

Generalized Opportunities:
- Please refer to the Presidio Trails and Bikeways Master Plan at http://www.nps.gov/goga/admin/planning/trails_bikeways/index.htm

Generalized Constraints:
- Please refer to the Presidio Trails and Bikeways Master Plan at http://www.nps.gov/goga/admin/planning/trails_bikeways/index.htm

Improvement Options:
- Please refer to the Presidio Trails and Bikeways Master Plan at http://www.nps.gov/goga/admin/planning/trails_bikeways/index.htm

Planning Level Cost Estimate:
- Please refer to the Presidio Trails and Bikeways Master Plan at http://www.nps.gov/goga/admin/planning/trails_bikeways/index.htm

ROUTE 310: TAYLOR STREET/CALIFORNIA STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:

This route provides the most gradual, practical assent of Nob Hill and connects Route 10 (Pacific Avenue) and Route 210 (Broadway) with Route 25 (Polk Street). From Pacific Avenue and Taylor Street it follows Taylor and California Streets to Polk Street. Warning signs should be installed at all cable car track crossings. The roadway surface at these crossings is smooth enough to make this a good route.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 325: ELEVENTH STREET (BETWEEN 13TH AND HARRISON STREETS)

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This is a one block connector between Routes 25 (11th Street) and 36 (13th Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 330: SEVENTH AVENUE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This route connects Route 30 (JFK Drive) and Route 20 (Cabrillo Street) via 7th Avenue. It provides access to Golden Gate Park from the Inner Richmond District. Route 330 is a signed route north of Fulton Street and is a multi-use path south of this point, in Golden Gate Park.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 345: WEBSTER STREET (DUBOCE TO SUTTER)

Network Improvement Project Location(s):

- Webster Street, from Hermann Street to Grove Street

Current Route Description:
Webster Street provides a connection between Route 16 (Sutter Street/Post Street one-way couplet) and Route 30 (Duboce Avenue).

Generalized Opportunities:

- Webster Street, from Hermann Street t to Grove Street
  - Consult Planning Dept regarding the former UCSF Extension Campus
  - This segment could be an alternative to the Octavia Boulevard if the design proves to be bicycle unfriendly.

Generalized Constraints:

- Webster Street, from Hermann Street to Grove Street
  - Consult Planning Dept regarding the former UCSF Extension Campus

Improvement Options:

- Webster Street, from Hermann Street to Grove Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework.
  - Improve Bicycle Route Signage
  - Explore striping bike lanes.
  - Explore installing Shared Lane Pavement Markings "Sharrows"

ROUTE 350: DUBOCE AVENUE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Westbound Duboce Avenue is westbound Route 30. In the eastbound direction, Route 30 uses 14th Street. The eastbound connection from the "Wiggle" to Market Street is Route 350 via Duboce Avenue.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 365: KEZAR DRIVE MULTI-USE PATH

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
The Kezar Drive Multi-use Path (between JFK Drive and Lincoln Way) provides a very important connection from Market Street and the Haight (via Route 30 (the Panhandle Multi-use Path) or Route 32 (Page Street)) to Route 65 (5th Avenue, Hugo Street and 7th Avenue). Route 65 will provide access to West Portal, SFSU, and via connection with Route 40 (Kirkham Street and Parnassus Avenue) to the Sunset and UC Medical Center.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 395 EL CAMINO DEL MAR

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
As a scenic alternative to Route 95 between the intersection of El Camino del Mar/30th Avenue and the intersection of Clement Street/34th Avenue, cyclists may wish to continue along El Camino del Mar and Route 85 (Legion of Honor Drive). This route traverses Lincoln Park and passes the Palace of the Legion of Honor. From Legion of Honor Drive cyclists can continue to the Great Highway via Clement Street or continue on Route 85 to Golden Gate Park.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 525: TWENTY THIRD STREET/KANSAS STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This route was designed to direct cyclists around the Potrero Avenue/Cesar Chavez Street/Bayshore Boulevard/US 101 interchange. It routes them east of US 101, north of Cesar Chavez Street, and avoids this difficult intersection. The route begins at Route 25 (Potrero Avenue) and crosses US 101 via 23rd Street, continuing via Kansas, 26th, and Vermont Streets to Route 60 (Cesar Chavez Street).

Generalized Opportunities:

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

ROUTE 530: 30TH AVENUE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
30th Avenue provides access to Route 30 (JFK Drive) in Golden Gate Park from Route 20 (Cabrillo Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 534: MARTIN LUTHER KING JR. DRIVE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This is a one block connector between Routes 34 (Martin Luther King Jr. Drive) and 85 (Sunset Boulevard and 34th Avenue).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 536: THIRD STREET (KING TO TOWNSEND STREETS)

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This is a one block northbound connector between Routes 5 (Third Street, King Street, The Embarcadero) and 36 (Townsend Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 545: MCCOPPIN STREET/VALENCIA STREET

Network Improvement Project Location(s):

- McCoppin Path, from Valencia Street to Market Street

Current Route Description:
McCoppin Street between Market and Valencia Streets provides a connection between eastbound Route 50 (Market Street) and southbound Route 45 (Valencia Street). Valencia Street between McCoppin and Market Streets provides a connection between northbound Route 45 (Valencia Street) and eastbound Route 50 (Market Street).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

- McCoppin Path, from Valencia Street to Market Street
    - Monitor Path once completed and make improvements as necessary.

ROUTE 565: MARTIN LUTHER KING JR. DRIVE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Provides a spur between Route 65 (Bowling Green Drive) and Route 365 (Kezar Drive Multi-use Path) within Golden Gate Park,

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 705: PAUL AVENUE/ MCLAREN PARK/ OCEAN AVENUE

Network Improvement Project Location(s):

- Mansell Street, from San Bruno Avenue to University Street
- Mansell Street, from University Street to Persia Avenue
- Persia Avenue, from Mansell Street to Ocean Avenue

Current Route Description:
Route 705 is an one-way westbound signed route on Paul Avenue between Third Street (Route 5) and Bayshore Boulevard (Route 25). Northbound Route 5 cyclists remain on 3rd Street. However, southbound Route 5 cyclists are detoured from 3rd Street (Route 5) via Route 705 (Paul Avenue) and Route 25 (San Bruno Avenue) back to southbound Route 5 (Bayshore Boulevard) just north of Arleta Avenue.

Generalized Opportunities:

- Mansell Street, from San Bruno Avenue to University Street
    - Bike lanes exist along this portion of Mansell Street

Generalized Constraints:

- Mansell Street, from University Street Persia Avenue
    - Currently not on the Bicycle Route Network
- Persia Avenue, from Mansell Street to Ocean Avenue
    - Currently not on the Bicycle Route Network

Improvement Options:

- Mansell Street, from San Bruno Avenue to University Street
    - Improve the bicycle facilities along this segement
- Mansell Street, from University Street Persia Avenue

  - Study for inclusion in the Bicycle Route Network
- Persia Avenue, from Mansell Street to Ocean Avenue
  - Study for inclusion in the Bicycle Route Network

ROUTE 730: 43RD AVENUE/CHAIN OF LAKES DRIVE WEST NETWORK IMPROVEMENT PROJECT LOCATION(S):

Network Improvement Project Location(s):

- Chain of Lakes Path, from Fulton Street to JFK Drive

Current Route Description:
Beginning at Route 20 (Cabrillo Street), this route follows 43rd Avenue to the multi-use path on former Chain of Lakes Drive West and continues south of JFK Drive (Route 30) to the Golden Gate Park Bicycle Path (Route 830). Northbound, leaving Golden Gate Park, this route briefly jogs onto Chain of Lakes Drive East to avoid the one-way section of Chain of Lakes Drive West that is open to motor vehicles.

Generalized Opportunities:

- Chain of Lakes Path, from Fulton Street to JFK Drive
  - Consult with Rec and Park Staff and the Golden Gate Park Master Plan

Generalized Constraints:

- Chain of Lakes Path, from Fulton Street to JFK Drive
  - Consult with Rec and Park Staff and the Golden Gate Park Master Plan

Improvement Options:

- Chain of Lakes Path, from Fulton Street to JFK Drive
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework, consult with Rec and Park Staff to proceed with resurfacing, striping, and signage

ROUTE 749: DIAMOND STREET

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This signed route on Diamond Street connects Route 49 (Jersey Street/Diamond Street) with Route 60 (Clipper Street) and provides a connection from Noe Valley to the Twin Peaks area.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 760: 14TH AVENUE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This route provides a connection between Route 60 (Vicente Street) and Route 50 (Portola Drive).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 765: NORTH-EAST OUTLET PATH, GOLDEN GATE PARK

Network Improvement Project Location(s):

- Horseshoe Court Path, from Fulton Street to Conservatory East Street

Current Route Description:
Route 765 provides access to St. Mary's Hospital, University of San Francisco and Golden Gate Park, and access to Route 65 (West Conservatory Drive) and Route 30 (Panhandle Multi-use Path/JFK Drive).

Generalized Opportunities:

- Horseshoe Court Path, from Fulton Street to Conservatory East Street
  - Golden Gate Park Master Plan
  - Concourse Authority Transportation Improvement Plan (TIP) Please refer: www.goldengateparkconcourse.org/golden_gate/docs/ImplemPlanMatrix_2003.pdf

Generalized Constraints:

- Horseshoe Court Path, from Fulton Street to Conservatory East Street
  - Golden Gate Park Master Plan

Improvement Options:

- Horseshoe Court Path, from Fulton Street to Conservatory East Street
  - This segment was recommended for improvements within the Bicycle Plan: Policy Framework, consult with Rec and Park Staff to proceed with resurfacing, striping, and signage

ROUTE 770: PHELAN AVENUE

Network Improvement Project Location(s):

- Phelan Avenue, from Judson Avenue to Ocean Avenue

Current Route Description:

Gennessee Street and Phelan Avenue provide a connection between Route 70 (Monterey Boulevard and Hearst Avenue) and Route 84 (Ocean Avenue). These streets provide direct access to City College of San Francisco. The route starts at the Gennessee Street/Hearst Avenue intersection and continues via Gennessee Street, Judson Avenue, and Phelan Avenue to Ocean Avenue (Route 84).

Generalized Opportunities:

- Phelan Avenue, from Judson Avenue to Ocean Avenue
  - Pedestrian and Traffic Calming Planning efforts have identified bike lanes along Phelan Avenue
  - DPT has obtained grant funds to stripe and sign bike lanes on Phelan Avenue from Judson to Ocean Avenues.
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- Phelan Avenue, from Judson Avenue to Ocean Avenue
  - Coordinate with the Pedestrian and Traffic Calming Programs
  - This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

- Phelan Avenue, from Judson Avenue to Ocean Avenue
  - Stripe Bike Lanes – This is funded by a BAAQMD grant and scheduled for completion before January 2007.

ROUTE 775: SAN FRANCISCO STATE UNIVERSITY

Network Improvement Project Location(s):

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way (Please refer to Route 75)

Current Route Description:

South of Eucalyptus Drive, Route 775 follows 20th Avenue and then directs cyclists to the Stonestown Shopping Center parking lot's access road to the southerly part of Buckingham Way. Please refer to Route 75.

Generalized Opportunities:

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way (Please refer to Route 75)
  - Please refer to Route 75 and the 19th Avenue Summary Sheets in Appendix 9a.

Generalized Constraints:

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way (Please refer to Route 75)
  - Please refer to Route 75 and the 19th Avenue Summary Sheets in Appendix 9a.

Improvement Options:

- Nineteenth Avenue, from Holloway Avenue to Buckingham Way (Please refer to Route 75)
  - Please refer to Route 75 and the 19th Avenue Summary Sheets in Appendix 9a.

ROUTE 785: SUNSET BOULEVARD PATH/OCEAN AVENUE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This route provides a connection from eastbound Lake Merced Boulevard (Routes 86 and 885) or the Lake Merced Path to northbound Route 85 (Clearfield Drive/34th Avenue). It crosses Lake Merced Boulevard at the marked and signed crosswalk just west of Sunset Boulevard and follows southbound Route 85, but in the opposite direction.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 805: CANDLESTICK PARK

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This route serves Monster Park and Candlestick Point State Recreation Area, by connecting to Routes 5 (Third Street), 7 (Keith Street), and 905 (Tunnel Road). The route follows Harney Way, Jamestown Avenue Extension, and the southern part of Hunters Point Expressway. Then the route continues along Carroll Avenue, Fitch Street

(Arelious Walker Drive), Gilman Avenue, Hunters Point Expressway, Alana Way, and Beatty Avenue.

Generalized Opportunities:

Generalized Constraints:

- Carroll Avenue is an important truck route in the General Plan's Transportation Element.

Improvement Options:

ROUTE 830: MARTIN LUTHER KING JR/ MIDDLE PATH, GOLDEN GATE PARK

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Recreational cyclists who wish to avoid on-street Route 34 (Middle Drive West/Martin Luther King Jr.) and on-street Route 30 (JFK Drive) can use the Route 830 bicycle paths. Route 830 begins at Route 30 across from Lloyd Lake and runs south of Speedway Meadows, the Polo Field, Middle Lake and the Bercut Equitation Field. This path ends at Lincoln Way between 46th and 47th Avenues.

Generalized Opportunities:

- Golden Gate Park Master Plan
  - Concourse Authority Transportation Improvement Plan (TIP) http://www.goldengateparkconcourse.org/golden_gate/docs/ImplemPlanMatrix_2003.pdf

Generalized Constraints:

- Golden Gate Park Master Plan
  - Concourse Authority Transportation Improvement Plan (TIP) http://www.goldengateparkconcourse.org/golden_gate/docs/ImplemPlanMatrix_2003.pdf

Improvement Options:

ROUTE 885: LAKE MERCED BOULEVARD/JOHN MUIR DRIVE/SKYLINE BOULEVARD

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Route 885 is an on-street loop route around Lake Merced. It consists of parts of Routes 85, 86, 91, and 95. The 885 designation provides a guide for cyclists who wish to circle the lake.

In the clockwise direction, Route 85 follows Lake Merced Boulevard, John Muir Drive, and Skyline Boulevard back to Lake Merced Boulevard. In the counter-clockwise direction, in order to avoid the narrow lanes of Lake Merced Boulevard and the busy intersection of Sunset and Lake Merced Boulevards, Route 885 deviates from the lake at the north end. It is routed via the streets that are used for both northbound and southbound Route 85: Middlefield Drive, Gellert Drive, Clearfield Drive, Ocean Avenue, and the path just west of Sunset Boulevard back to Lake Merced Boulevard.

Generalized Opportunities:

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Generalized Constraints:

- This bicycle facility is located on a Muni route. Any improvements should be planned and integrated under the MTA approved guidance published in chapter 2 of the 2004 San Francisco Bicycle Plan: Policy Framework.

Improvement Options:

ROUTE 905: TUNNEL ROAD

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
This signed route provides a low traffic volume alternative to Route 5 (Bayshore Boulevard) via Tunnel Road between its intersection with Bayshore Boulevard and the San Mateo County line.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 930: 47TH AVENUE/ DUTCH WINDMILL

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
Cyclists from the Outer Richmond District may access Route 30 (JFK Drive) via Route 930 (47th Avenue). The route begins at Route 20 (Cabrillo Street) and ends in Golden Gate Park at Route 30.

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

ROUTE 990: CITY COLLEGE OVERCROSSING OF OCEAN AVENUE

Network Improvement Project Location(s):
No new network improvements were identified in the 2004 Planning Process

Current Route Description:
The route connects westbound Route 90 (Geneva Avenue) with City College via the non-motor vehicle overcrossing of Ocean Avenue. Note that there is no connection from eastbound Route 90 with City College via this overcrossing, as the eastbound and westbound lanes of Geneva Avenue are at different grades and are separated by a wall. Access to city College from the west is via Phelan Avenue (Route 710).

Generalized Opportunities:

Generalized Constraints:

Improvement Options:

7.0 FOR MORE INFORMATION

For more information on Bicycle Circulation/Safety Category:

Visit the San Francisco Bicycle Program's website (www.bicycle.sfgov.org) or Contact:

Peter S. Tannen
San Francisco Department of Parking and Traffic
25 Van Ness Avenue, Suite 345
San Francisco, CA 94102
(415) 554-2396
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For more information on Prop K or other 5-Year Prioritization Programs:

Visit the Authority's website (www.sfcta.org) and click on "Funding Opportunities" or Contact:

Maria Lombardo, Chief Deputy Director for Programming & Legislation
Email: maria_lombardo@sfcta.org
Phone: 415.522.4802

or
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8.0 ACKNOWLEDGEMENTS

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FUNDING TABLES

DRAFT TABLE 5.1

	A	B	C	D	E	H	O	P	Q	R	S	T	U	V	W	X
1																
2	Street	FROM_Street	TO_Street	ROUTE_NUM	Secondary Route Number	POLICY_CLASS		Primary Funding			Funding Match		FY04-05			
3													Planning	Envt	Design	Constr
4							Source	Amt	Secured	Source	Amt	Secured				
5																
6																
7	Bicycle Plan Envirmental Review						Prop K	24,000	YES					24,000		
8	Parking						Prop K	69,000	YES							
9	Prop K Five Year Plan						Prop K	14,600	YES				14,600			
10	Safety						Prop K	162,000	YES							
11	Spot Improvements						Prop K	220,000	YES							
12	Maintenance						Prop K	50,000	YES							
13																
14	02nd Street	Market Street	Mission Street	11		Improvements to Existing Network								24,000		
15	02nd Street	Mission Street	Harrison Street	11		Improvements to Existing Network								75,000		
16	02nd Street	Harrison Street	Townsend Street	11		Improvements to Existing Network								79,000		
17	02nd Street	Townsend Street	King Street	11		Improvements to Existing Network										
18	03rd Street	Cargo Way	Bayshore Boulevard	05		Changes to Existing Network										
19	03rd Street	China Basin Street	Cargo Way	11		Changes to Existing Network										
20	05th Ave Path	Martin Luther King Jr.Dr	Lincoln Way	65		Improvements to Existing Network										
21	05th Street	Brannan Street	Townsend Street	19		Improvements to Existing Network								42,000		
22	05th Street	Mission Street	Harrison Street	19		Improvements to Existing Network								124,000		
23	05th Street	Market Street	Mission Street	19		Improvements to Existing Network								43,000		
24	05th Street	Harrison Street	Brannan Street	19		Improvements to Existing Network								82,000		
25	07th Avenue	Kirkham Street	Lawton Street	65		Improvements to Existing Network										
26	11th Street	Market Street	Mission Street	25		Improvements to Existing Network										
27	14th Street	Market Street	Dolores Street	30		Improvements to Existing Network	Prop K	31,000	YES	BTA	20,000	YES	7,000	1,000	23,000	
28	15th Street	Market Street	Harrison Street	n/a		Recommended study										
29	16th Street	Market Street	South Van Ness Ave	n/a		Recommended study										
30	16th Street	South Van Ness Avenue	Bryant Street	n/a		Recommended study										
31	17th Street	Corbett Street	Market Street	40	50											
32	17th Street	Market Street	Harrison Street	n/a		Recommended study										
33	17th Street	Harrison Street	Potrero Avenue	n/a		Recommended study										
34	17th Street	Potrero Avenue	Kansas Street	n/a		Recommended study										
35	18th Street	Diamond	Harrison Street	n/a		Potential Inclusion										
36	19th Avenue	Holloway Avenue	Buckingham Way	75		Improvements to Existing Network										
37	20st Avenue	Sloat Boulevard	Buckingham Way	76												
38	20th Avenue	Wawona Street	Lincoln Way	75		Improvements to Existing Network										
39	22nd Street	Potrero Avenue	Chatanooga Street	44		Improvements to Existing Network										
40	23rd Street	Valencia Street	San Bruno	n/a		Improvements to Existing Network										
41	25th Avenue	Lincoln Way	Kirkham Street	n/a		Potential Inclusion										
42	26th Street	Valencia Street	Hampshire Street	n/a		Recommended study										
43	29th Street	Dolores Street	Church Street	45		Potential Inclusion										
44	29th Street	Sanchez Street	Church Street	49												
45	30th Street	Church Street	Whitney Street	49		Improvements to Existing Network										
46	30th Street	Dolores Street	Chenery Street	45	49	Improvements to Existing Network										
47	30th Street	Chenery Street	Church Street	49		Improvements to Existing Network										
48	30th Street	Whitney Street	Sanchez Street	49		Improvements to Existing Network										
49	34th Ave Path	Polo Fields Path	MLK Dr	85		Improvements to Existing Network										
50	Alemany Boulevard A	San Jose Avenue	Rousseau Street	45		Changes to Existing Network	BTA	238,500	YES	TFCA-R	26,500	YES			15,000	
51	Alemany Boulevard B	Rousseau Street	Couplet "Split" (Justin Dr.)	45		Changes to Existing Network	RBPP	171,000	APPLD	TBD	-170,559	NO				
52	Alemany Boulevard C	Couplet "Split"(n of Justin D	Putnam Street													
53	Alemany Boulevard D	Putnam Street	101/280													
54	Alemany Boulevard E	Alemany Circle	Alemany Circle													
55	Ashbury Street	Page Street	Panhandle Path													
56	Baker Street	Turk Street	Sacramento	n/e		Potential Inclusion										
57	Baker Street	Page Street	Panhendle Path													
58	Barneveld Avenue	Loomis Street	Jerrold Avenue	25												
59	Battery East Path	Lincoln Boulevard	Golden Gate Bridge	202		Improvements to Existing Network										
60	Battery Street	Embarcadero, The	Market Street	n/e		Improvements to Existing Network										

	A	B	C	D	E	H	O	P	Q	R	S	T	U	V	W	X
1					Secondary			Primary			Funding					
61	Bay Street	Embarcadero, The	Fillmore Street	n/e		Recommended study										
62	Beyshore Boulevard 1A	Paul Avenue	Mansell Street	25		Recommended study										
63	Bayshore Boulevard 1B	Fitzgerald Avenue	Paul Avenue	25		Recommended study										
64	Bayshore Boulevard 1C	Silver Avenue	Fitzgerald Avenue	25		Recommended study										
65	Bayshore Boulevard 1D	Industriel Street	Silver Avenue	25		Recommended study										
66	Bayshore Boulevard 1E	US101 Off_Ramp	IndustrialStreet	25		Recommended study										
67	Bayshore Boulevard 1F	Cesar Chavez Street	US101 Off_Ramp	25		Recommended study										
68	Bayshore Boulevard 2	Hester Avenue	San Mateo County Line	05		Recommended study										
69	Bayshore Boulevard 2	Mansell Street	Hester Avenue	25	5	Recommended study										
70	Beach Street	Van Ness Avenue	the Embarcadero	n/a		Recommended study										
71	Bosworth St/O'Shaughnessy Blvd	San Jose Avenue	Portola Drive	55		Improvements to Existing Network										
72	Bosworth Street	Cayuga Avenue	Alemany Boulevard	n/a		Potential Inclusion										
73	Brannan Street	Embarcadero, The	Division Street	n/a		Potential Inclusion										
74	Broadway	Powell Street	Larkin Street	10	210	Improvements to Existing Network										
75	Broderick Street	Francisco Street	Marine Bouleverd	n/a		Potential Inclusion										
76	Brotherhood Way	Leke Merced	Arch Street	n/a		Potential Inclusion										
77	Buckingham Way	19th Avenue	20th Street Avenue	75		Improvements to Existing Network										
78	Buckingham Way	20th Avenue	21st Street Avenue	75		Improvements to Existing Network										
79	California Street	Masonic Avenue	Van Ness Avenue	n/a		Potential Inclusion										
80	Cepp Street	26th Street	15th Street	n/a		Potential Inclusion										
81	Cargo Way	End	03rd Street	n/a		Potential Inclusion										
82	Cesar Chavez Street A	Guerrero Street	Sanchez Street	60		Recommended study										1,000
83	Cesar Chavez Street B	US101	Guerrero Street	60		Recommended study										
84	Cesar Chavez Street C	Kansas Street (US101)	Mississippi (US280)	60		Improvements to Existing Network	RBPP	106,000	APPLD	TBD	26,000	NO				
85	Chain of Lakes Dr West	Chain of Lakes Dr East	Bercut Equitation Fld	730		Improvements to Existing Network										
86	Chenery Street	30th Street	Diamond Street	45		Improvements to Existing Network										
87	Church Street	29th Street	30th Street	49												
88	Circular Avenue	Monterey Boulevard	Havelock	n/a		Potential Inclusion										
89	Clayton Street	Page Street	Penhandle Path													
90	Columbus Avenue	Washington Street	Northpoint Street	11		Improvements to Existing Network										
91	Columbus Avenue	Northpoint Street	Beach Street	n/a		Potential Inclusion										
92	Conservatory Drive East	Arguello Boulevard	John F Kennedy Drive	65		Improvements to Existing Network										
93	Conservatory Drive West	Arguello Boulevard	John F Kennedy Drive	65		Improvements to Existing Network										
94	Corbett Avenue	Clayton Street	17th Street	50	40	Improvements to Existing Network										
95	Division Street	Townsend Street	11th Street	36		Improvements to Existing Network										
96	Dolores Street	29th Street	San Jose Avenue	45		Changes to Existing Network										
97	Duboce Avenue	Valencia Street	Market Street	n/a		Potential Inclusion										
98	Duboce Perk	Noe Street	Waller Street	n/a		Potential Inclusion										
99	Embarcadero Promenade,The	North Point Street	King Street	05		Improvements to Existing Network										
100	Embarcadero, The	Northpoint Street	Taylor Street	n/a		Improvements to Existing Network										
101	Evans Avenue	03rd Street	Cesar Chavez Street	68		Improvements to Existing Network										
102	Fell Street	Masonic Avenue	Masonic Avenue	30		Improvements to Existing Network	Prop K	8,000	YES					1,000	2,000	5,000
103	Fell Street	Scott Street	Baker Street	n/a		Changes to Existing Network										
104	Fort Mason Tunnel	Aquatic Park	Laguna Street	n/a		Recommended study										
105	Francisco Street	Octavia Street	Lagune Street	n/a		Vestigal Bike Lane										
106	Fremont Street	Howard Street	Harrison Street	n/a		Potential Inclusion										
107	Front Street	Green Street	Jackson Street	n/a		Vestigal Bike Lane										
108	Fulton Street	Webster Street	Baker Street	20	45	Improvements to Existing Network	BTA	15,600	YES							
109	Geary Boulevard	Divisadero	25th Avenue	n/a		Potential Inclusion										
110	Geneve Avenue	Ocean Avenue	Paris Street	90		Improvements to Existing Network										
111	Golden Gate Avenue	Parker Avenue	Masonic Avenue	20		Changes to Existing Network										
112	Golden Gete Avenue	Baker Street	Market Street	n/a		Potential Inclusion										
113	Great Highway,The	Balboa Street	Point Lobos Avenue	95												
114	Greenwich Street	Octevia Street	Lyon Street	06		Improvements to Existing Network										
115	Greenwich Street	Polk Street	Octavia Street	n/a		Potentiel Inclusion										
116	Grove Street	Ven Ness Avenue	Polk Street	20		Changes to Existing Network										
117	Grove Street	Scott Street	Baker Street	n/a		Vestigal Bike Lane										
118	Guerrero Street/San Jose Avenue	29th Street	Cesar Chavez Street	45		Improvements to Existing Network	Prop K	44,000	YES						4,000	40,000
119	Heyes Street	Scott Street	Divisidero Street	30		Chenges to Existing Network										

	A	B	C	D	E	H	O	P	Q	R	S	T	U	V	W	X
1					Secondary			Primary			Funding					
120	Hayes Street	Broderick Street	Baker Street	30		Changes to Existing Network										
121	Hayes Street	Divisidero Street	Broderick Street	30		Changes to Existing Network										
122	Holloway Avenue	19th Avenue	Plymouth Avenue	90		Improvements to Existing Network										
123	Horseshoe Court Path	Fulton Street	Conservatory Dr East	765		Improvements to Existing Network										
124	Illinois Street A	16th Street	Mariposa Street	05		Changes to Existing Network										
125	Illinois Street B	Mariposa Street	18th Street	05		Changes to Existing Network										
126	Illinois Street C	18th Street	19th Street	05		Changes to Existing Network										
127	Illinois Street D	19th Street	20th Street	05		Changes to Existing Network										
128	Illinois Street E	20th Street	22nd Street	05		Changes to Existing Network										
129	Illinois Street F	22nd Street	25nd Street	05												
130	Illinois Street G	25th Street	Cesar Chavez Street	05		Changes to Existing Network										
131	Illinois Street H	Marin Street	Islais Creek Bridge	05		Changes to Existing Network	TFCA	75,000	YES						15,000	
132	Illinois Street I	Islais Creek Bridge	Islais Creek Bridge	05		Changes to Existing Network	RBPP	991,000	APPLD	TBD		NO				
133	Indiana Street	23rd Street	Cesar Chavez Street	07		Improvements to Existing Network										
134	Industrial Street	Bayshore Boulevard	Loomis Street	25												
135	Industrial Street	Oakdale Avenue	Loomis Street	n/a		Changes to Existing Network										
136	Jefferson Street	Embarcadero, The	Larkin Street	n/a		Recommended study										
137	Jennings Street	Evans Avenue	Cargo Way	n/a		Potential Inclusion										
138	Jerrold Avenue	Bameveld Avenue	Bayshore Boulevard	25												
139	John F Kennedy Drive	The Great Highway	Transverse Drive	30		Improvements to Existing Network										
140	John F Kennedy Drive	Transverse Drive	Stanyan Street	30		Improvements to Existing Network	RBPP	174,000	APPLD	GGPC AU	105,000	YES				
141	John Muir Drive	Lake Merced Blvd	Syline Drive	91	885	Changes to Existing Network	BTA	50,000	YES							
142	Keamy Street	Market Street	Columbus Avenue	n/a		Potential Inclusion										
143	Kirkham Street	Lower Great Hwy	The Great Highway	40		Improvements to Existing Network										
144	Kirkham Street	06th Avenue	The Great Highway	40		Improvements to Existing Network										
145	Laguna Honda Boulevard	Portola Drive	Dewey Boulevard	60		Improvements to Existing Network	TFCA-G	10,500	YES							
146	Laguna Honda Boulevard	Forest Hills Muni Sta	Woodside Avenue	65		Improvements to Existing Network	STIP	0	YES				4,000	2,000	117,000	
147	Laguna Honda Boulevard	Plaza Street	Forest Hills Muni Sta	65		Improvements to Existing Network	STIP	INC IN BEL	YES				4,000	2,000	131,000	
148	Lake Merced Boulevard	Skyline Boulevard	John Muir Drive	85	0	Improvements to Existing Network										
149	Lake Merced Boulevard	Skyline Boulevard	John Muir Drive	85												
150	Lake Merced Path	Northern Portion (E-W)	Eastern Portion (N-S)	885	85/86/91/95	Improvements to Existing Network										
151	Lake Merced Path	Western Portion (N-S)		91												
152	Lake Street	03rd Avenue	Arguello Boulevard	10		Improvements to Existing Network	PROP K	-	YES				500		500	4,000
153	Loomis Street	Industrial Street	Bameveld Avenue	25		Changes to Existing Network										
154	Lyell Street	Alemany Boulevard	Bosworth Street	45		Improvements to Existing Network										
155	Mansell Street	San Bruno Avenue	University Street	705		Improvements to Existing Network										
156	Mansell Street	University Street	Persia Street	n/a		Potential Inclusion										
157	Marina Boulevard	Laguna Street	Lyon Street	02		Recommended study										
158	Mariposa Street	Pennsylvania	Indiana Street	23		Improvements to Existing Network										
159	Market Street	8th Street	Van Ness Avenue	50			Prop K	10,000	YES					1,000	9,000	
160	Market Street [eastbound] A,B,C	Noe Street	Sanchez Street	50		Improvements to Existing Network										
161	Market Street [eastbound] A,B,C	Church Street	Dolores Street	50		Improvements to Existing Network										
162	Market Street [eastbound] A,B,C	Castro Street	Noe Street	50		Improvements to Existing Network										
163	Market Street [eastbound] D	Sanchez Street	Church Street	50		Improvements to Existing Network										
164	Market Street [eastbound] D,E	Dolores Street	Guerrero Street	50		Improvements to Existing Network										
165	Market Street [westbound]	Noe Street	17th Street													
166	Market Street [westbound] A,B,C	Buchannan Street	Church Street	50		Improvements to Existing Network										
167	Market Street [westbound] A,B,C	Church Street	Sanchez Street	50		Improvements to Existing Network										
168	Market Street [westbound] D,E	Octavia Street	Laguna Street	50		Improvements to Existing Network										
169	Market Street [westbound] D,E	Laguna Street	Buchannan Street	50		Improvements to Existing Network										
170	Market Street [westbound] F,G	Sanchez Street	Noe Street	50		Improvements to Existing Network										
171	Masonic Avenue	Page Street	Geary Boulevard	55		Recommended study										
172	McAllister Street	Market Street	Masonic Avenue	20		Improvements to Existing Network										
173	McAllister Street	Baker Street	Polk Street	20		Improvements to Existing Network										
174	McCoppin Bikeway	Market Street	Valencia Street	45												
175	Mendell Street	Palou Street	Oakdale Aveune	n/a		Improvements to Existing Network										
176	Mission Street	Embarcadero, The	14th Street	n/a+D142		Improvements to Existing Network										
177	Mission Street Creek Bikeway	16th Street	04th Street	n/a		Improvements to Existing Network										
178	Mississippi Street	16th Street	Mariposa Street	23		Improvements to Existing Network										
179	Monterey Boulevard	San Jose Avenue	Junipero Serra	70		Improvements to Existing Network										

	A	B	C	D	E	H	O	P	Q	R	S	T	U	V	W	X
1					Secondary			Primary			Fundign					
180	Noriega Street	La Playa Street	19th Avenue	n/a		Potential Inclusion										
181	North Point Street	Embarcadero, The	Van Ness Avenue	02		Recommended study										
182	Oak Street	Scott Street	Baker Street	n/a		Potential Inclusion										
183	Oakdale Avenue	Phelps Street	03rd Street	70	170	Improvements to Existing Network										
184	Oakdale Avenue	Loomis Street	Bameveld Avenue	70	170	Improvements to Existing Network										
185	Oakdale Avenue	IndustrialStreet	US280/Selby (southeast sid	70	170	Improvements to Existing Network	Prop K	56,000	YES					1,000	21,000	34,000
186	Oakdale Avenue	Bayshore Boulevard	Loomis Street	70	170	Improvements to Existing Network										
187	Oakdale Avenue	Bameveld Avenue	IndustrialStreet	70	170	Improvements to Existing Network										
188	Ocean Avenue	Mission Street	Junipero Serra	84	90	Improvements to Existing Network										
189	Ocean Avenue					Potential Inclusion										
190	Octavia Boulevard	McChoppin Bikeway	Hayes Green													
191	O'Farrell	Polk Street	Market Street	n/a		Potential Inclusion										
192	O'Shaughnessy Path	Portola Drive	Bosworth Street	55		Improvements to Existing Network	STIP	80,000	YES				15,000	5,000	60,000	
193	Pacific Avenue	Polk Street	Steiner Street	n/a		Potential Inclusion										
194	Page Street	Stanyan Street	Market Street	32		Improvements to Existing Network										
195	Page Street Path	East of Kezar Dr Path	Stanyan St (@Page)	32		Improvements to Existing Network										
196	Page/Stenyan	Page & Stanyan Sts	Page & Stanyan Sts	32		Improvements to Existing Network										
197	Palou Avenue	Newhall Street	Phelps Street	70	07	Changes to Existing Network										
198	Palou Avenue	03rd Street	Newhall Street	70	07	Changes to Existing Network										
199	Panhandle Path E-W @ Masonic Avenue	East Side of Masonic Avenue Intersection	West Side of Masonic Avenue Intersection													
200	Panhandle Path N-S @ Ashbury St	Oak Street	Panhandle Path(E-W)	55		Improvements to Existing Network										
201	Panhandle Path N-S @ Baker St	Oak Street	Panhandle Path(E-W)	n/a		Changes to Existing Network										
202	Panhandle Path N-S @ Clayton St	Oak Street	Panhandle Path(E-W)	55		Improvements to Existing Network										
203	Parker Avenue	Turk Street	Golden Gate Avenue	20		Improvements to Existing Network										
204	Perimeter Path	Avenue of the Palms		n/a		Changes to Existing Network										
205	Persia Street	Mansell Street	Ocean Avenue													
206	Phelan Avenue	Judson Avenue	Ocean Avenue	770	70	Improvements to Existing Network	TFCA-G	82,000	YES						11,000	
207	Phelps Street	Oakdale Avenue	Palou Avenue	07	70	Changes to Existing Network										
208	Plymouth Avenue	Ocean Avenue	Holloway Avenue	90												
209	Point Lobos Avenue	Great Highway, The	48th Avenue	95		Improvements to Existing Network										
210	Polk Street A	Hayes Street	Market Street	25		Improvements to Existing Network										
211	Polk Street B	Lech Walesa	Hayes Street	25		Improvements to Existing Network										
212	Polk Street C	Grove Street	Lech Walesa	25		Improvements to Existing Network										
213	Polk Street D	McAllister Street	Grove Street	25		Improvements to Existing Network										
214	Polo Field Bike Path	Polo Field	34th Avenue Path	85		Improvements to Existing Network										
215	Portola Drive A	Saint Francis Boulevard	Santa Ana Avenue	50		Improvements to Existing Network										
216	Portola Drive B	Santa Ana Avenue	Santa Clara Avenue	50		Improvements to Existing Network										
217	Portola Drive C	Santa Clara Avenue	Waithman Way	50		Improvements to Existing Network										
218	Portola Drive D	Waithman Wey	Sydney/Fowler Avenue	50		Improvements to Existing Network										
219	Portola Drive E	Sydney Way / Fowler Aven	Twin Peaks Boulevard	50		Improvements to Existing Network										
220	Portola Drive F	Twin Peaks Bouleverd	Clipper Street	50		Improvements to Existing Network										
221	Portola Drive G	Clipper Street	Corbett Avenue	50		Improvements to Existing Network										
222	Post Street	Steiner Street	Merket Street	16		Improvements to Existing Network										
223	Potrero Avenue	Cesar Chavez Street	17th Street	25												
224	Potrero Avenue	17th Street	Division Street	25												
225	Potrero Avenue	23rd Street	23rd Street	25			Prop K	98,000	YES					1,000	3,000	94,000
226	Presidio Bouleverd	Pacific Avenue	Geary Boulevard	55		Improvements to Existing Network										
227	Randolph Street	Ralston Street	Saint Charles Avenue	n/a		Changes to Existing Network										
228	Randolph Street	Vernon Street	Ralston Street	n/a		Changes to Existing Network										
229	Randolph Street	Arch Street	Vernon Street	n/e		Changes to Existing Network										
230	Romain Street Overpass	Market Street (eastside)	Market Street C56(westside	44		Improvements to Existing Network										
231	San Jose Avenue	Dolores Street	Chenery Street	45		Changes to Existing Network										
232	San Jose Avenue	Randall Street	29th Street				BTA	48,500	YES						6,000	49,000
233	Senchez Street	Day Street	30th Street	49		Improvements to Existing Network										
234	Sanchez Street	29th Street	Day Street	49		Improvements to Existing Network										
235	Shotwell Street	14th Street	26th Street	n/a		Potential Inclusion										
236	Silver Avenue	Alemany Boulevard	Oakdale Aveune	70		Improvements to Existing Network										
237	Sloat Bouleverd	19th Avenue	Le Playa Street	50		Improvements to Existing Network										

	A	B	C	D	E	H	O	P	Q	R	S	T	U	V	W	X
1					Secondary			Primary			Funding					
238	Sloat Boulevard	Great Highway, The	Skyline Blvd.	50		Improvements to Existing Network	TFCG-G		YES							
239	Stanyan Street	Fulton Street	Frederick	n/a		Potential Inclusion										
240	Stockton Street	Broadway	Market Street	17		Improvements to Existing Network										
241	Sunset Path	Ocean Avenue	Lake Merced Blvd	85		Improvements to Existing Network										
242	Sutter Street	Market Street	Steiner Street	16		Improvements to Existing Network										
243	Terry Francois Boulevard	China Basin Street	Illinois Street	n/a		Changes to Existing Network										
244	Townsend Street	Embarcadero, The	02nd Street	36		Improvements to Existing Network										
245	Townsend Street	02nd Street	04th Street	36		Improvements to Existing Network										
246	Townsend Street	04th Street	Division Street	36		Improvements to Existing Network	RBPP		APPLD	TBD		NO				
247	Union Street	Steiner Street	Van Ness Avenue	n/a		Potential Inclusion										
248	Vicente Path	Lower Great Highway	The Great Highway	60		Improvements to Existing Network										
249	Washington Street	Embarcadero, The	Columbus Avenue	n/a		Potential Inclusion										
250	Webster Street	Hermann Street+B182	Grove Street	345		Improvements to Existing Network										
251	Wiggle,The	Church Street	Page Street	30		Improvements to Existing Network										
252	Winston Drive	Junipero Serra Boulevard	Lake Merced Boulevard	86		Improvements to Existing Network										
253	Woodside Avenue	Portola Drive	Laguna Honda Boulevard	60		Improvements to Existing Network										
254	Yosemite Avenue	03rd Street	Baytrail	n/a		Potential Inclusion										
255																
256	TOTALS												45,100	507,000	417,500	227,000
257																
258	PROP K SUB-TOTALS															

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	Fiscal_Year_Priority																				
2		FY05-06					FY06-07					FY07-08					FY08-09				
3	FY Tot	Planning	Envt	Design	Constr	FY Tot	Planning	Envt	Design	Constr	FY Tot	Planning	Envt	Design	Constr	FY Tot	Planning	Envt	Design	Constr	FY Tot
4																					
5																					
6																					
7	24,000															TBD					TBD
8	69,000					69,000					69,000					69,000					69,000
9	14,600															TBD					TBD
10	162,000					TBD					TBD					TBD					TBD
11	220,000					220,000					220,000					220,000					220,000
12	50,000					TBD					TBD					TBD					TBD
13																					
14	24,000			3,000		3,000				11,000	11,000					0					0
15	75,000			9,000		9,000				42,000	42,000					0					0
16	79,000			9,000		9,000				44,000	44,000					0					0
17		1,000			4,000	5,000										0					0
18												6,000				6,000					0
19					1,000	1,000										0					0
20																0	1,000	1,000	3,000	11,000	16,000
21	42,000			5,000		5,000				11,000	11,000					0					0
22	124,000			15,000		15,000				33,000	33,000					0					0
23	43,000			5,000		5,000				9,000	9,000					0					0
24	82,000			10,000		10,000				22,000	22,000					0					0
25							2,000		2,000	12,000	16,000					0					0
26							13,500				13,500										
27	31,000				50,000	50,000										0					0
28																0	4,500				4,500
29							107,000				107,000					0					0
30							48,000				48,000					0					0
31												3,000				3,000					0
32																0					0
33																0					0
34																0					0
35																0					0
36							12,000	8,000	158,000		178,000					0					0
37																					
38																0				83,000	83,000
39												3,000				3,000					0
40																0	4,500				4,500
41																0	4,500				4,500
42																0	4,500				4,500
43																0					0
44																0					0
45																0					0
46																0					0
47																0					0
48																0					0
49																0	2,000	2,000	8,000	25,000	37,000
50	15,000				250,000	250,000										0					0
51		13,000	13,000	36,000		62,000				145,000	145,000					0					0
52																					
53																					
54																					
55																					
56																0	4,500				4,500
57																					
58												3,000				3,000					0
59							4,050	4,050	16,200	56,700	81,000					0					0
60																0	4,500				4,500

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	Fiscal_Year_Priority																				
61																0	4,500				4,500
62		8,000	4,000	4,000		16,000				251,000	251,000					0					0
63		0	0	0		0				0	0					0					0
64		0	0	0		0				0	0					0					0
65		2,000	1,000	1,000		4,000				38,000	38,000					0					0
66		6,000	3,000	3,000		12,000				204,000	204,000					0					0
67		4,000	2,000	2,000		8,000				109,000	109,000					0					0
68		4,500				4,500										0					0
69		4,500				4,500										0					0
70																0	4,500				4,500
71												3,000				3,000					0
72																0	4,500				4,500
73																0	4,500				4,500
74	61,000															0					0
75																0	4,500				4,500
76																0	4,500				4,500
77							2,000		1,000		3,000				19,000	19,000					0
78							2,000		1,000		3,000				19,000	19,000					0
79																0	4,500				4,500
80																0	4,500				4,500
81																0	4,500				4,500
82	1,000															0					0
83							189,000				189,000					0				1,000,000	1,000,000
84			26,000	40,000		66,000				66,000	66,000					0					0
85												1,000	1,000	3,000	10,000	15,000					0
86																0					0
87																0					0
88																0	4,500				4,500
89																					
90												3,000				3,000					0
91																0	4,500				4,500
92						23,000										0					0
93																0				7,000	7,000
94																0					0
95												3,000				3,000					0
96												3,000				3,000					0
97																0	4,500				4,500
98																0	4,500				4,500
99												3,000				3,000					0
100																0	4,500				4,500
101							5,000		10,000		15,000				34,000	64,000					0
102	8,000															0					0
103																0	4,500				4,500
104																0	4,500				4,500
105																0	4,500				4,500
106																0	4,500				4,500
107																0	4,500				4,500
108						15,600										0					0
109																0	4,500				4,500
110												3,000				3,000					0
111																0					0
112																0	4,500				4,500
113												3,000				3,000					0
114												3,000				3,000					0
115																0	4,500				4,500
116												3,000				3,000					0
117																0	4,500				4,500
118	44,000															0					0
119												3,000				3,000					0

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	Fiscal_Year_Priority																				
120												3,000				3,000					0
121												3,000				3,000					0
122												3,000				3,000					0
123							1,550	1,550	6,200	21,700	31,000					0					0
124																0					0
125																0					0
126																0					0
127																0					0
128																0					0
129																					
130																0					0
131	15,000				60,000	60,000										0					0
132						991,000										0					0
133							12,000	12,000	24,000	101,000	768,000					0					0
134												3,000				3,000					0
135																0	4,500				4,500
136																0	4,500				4,500
137																0	4,500				4,500
138																0					0
139											0					0					0
140						279,000										0					0
141						50,000										0					0
142																0	4,500				4,500
143																0	1,000	1,000	3,000	8,000	13,000
144																0					0
145					10,500	10,500										0					0
146	123,000															0					0
147	137,000															0					0
148																0					0
149																0					0
150																0					0
151																0					0
152	5,000															0					0
153												3,000				3,000					0
154												3,000				3,000					0
155												3,000				3,000					0
156																0	4,500				4,500
157												120,000				120,000					0
158																0	4,500				4,500
159	10,000																				
160																0					0
161																0					0
162																0					0
163																0					0
164											1,000,000					0					0
165																					
166																0					0
167																0					0
168																0					0
169																0					0
170																0					0
171							302,800				302,800					0					0
172																0					0
173																0					0
174																0					0
175																0	4,500				4,500
176																0	4,500				4,500
177																0	4,500				4,500
178					9,000	9,000										0					0
179																0					0

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	Fiscal_Year_Priority																				
180																0	4,500				4,500
181																0					0
182																0	4,500				4,500
183																					
184																0					0
185	56,000															0					0
186																0					0
187																0					0
188																0					0
189																0					0
190																					
191																0	4,500				4,500
192	80,000									376,000	376,000					0					0
193																0	4,500				4,500
194												3,000				3,000					0
195		2,500	2,500	10,000		15,000				17,500	25,000					0					0
196		10,100	10,100	40,400		202,000				141,400	141,400					0					0
197																0					0
198																0					0
199																					
200							1,050	1,050	4,200	14,700	21,000					0					0
201							2,000	2,000	4,200	15,000	21,000					0					0
202							1,050	1,050	4,200	14,700	21,000					0					0
203												3,000				3,000					0
204																0	4,500				4,500
205																					
206	11,000				71,000	71,000										0					0
207																0					0
208												3,000				3,000					0
209												3,000				3,000					0
210							8,000				8,000					0					0
211							3,000				3,000					0					0
212							4,000				4,000					0					0
213												9,000				9,000					0
214																0					0
215																0					0
216																0					0
217																0					0
218																0					0
219																0					0
220																0					0
221																250,000					0
222												3,000				3,000					0
223																0					0
224																0					0
225	98,000																				
226												3,000				3,000					0
227																0	4,500				4,500
228																0	4,500				4,500
229																0	4,500				4,500
230																0					0
231																0					0
232	55,000																				
233																0					0
234																0					0
235																0	4,500				4,500
236												3,000				3,000					0
237																0					0

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1	Fiscal_Year_Priority																				
238					58,000	58,000										0					0
239																0	4,500				4,500
240																0					0
241																0	1,000	1,000	4,000	13,000	19,000
242												3,000				3,000					0
243																0	4,500				4,500
244												3,000				3,000					0
245							13,440	13,440	6,720		33,600				40,000	40,000					0
246						205,000										0					0
247																0	4,500				4,500
248																0	1,000	1,000	3,000	8,000	13,000
249																0	4,500				4,500
250												3,000				3,000					0
251		5,000		10,000		15,000				17,000	17,000										0
252																0					0
253												3,000				3,000					0
254																0	4,500				4,500
255																					
256	1,758,600	60,600	61,600	202,400	513,500	2,832,100	733,440	43,140	237,720	1,772,700	4,700,300	229,000	1,000	3,000	122,000	924,000	240,000	6,000	21,000	1,155,000	1,711,000
257																					
258	546,834																				

	AT	AV
1		
2	Proj. Tot	FY
3		
4		
5		
6		
7		
8	345,000	
9		
10		
11	1,100,000	
12		
13		
14	38,000	1
15	126,000	1
16	132,000	1
17	5,000	2
18	6,000	2
19	1,000	1
20	16,000	5
21	58,000	1
22	172,000	1
23	57,000	4
24	114,000	1
25	16,000	1
26	13,500	1
27	81,000	1
28	4,500	3
29	107,000	1
30	48,000	3
31	3,000	2
32	TBD	
33	TBD	
34	TBD	
35	TBD	5
36	178,000	5
37	TBD	
38	83,000	1
39	3,000	3
40	4,500	5
41	4,500	5
42	4,500	5
43	TBD	
44	TBD	
45	TBD	2
46	TBD	
47	TBD	
48	TBD	
49	37,000	2
50	265,000	2
51	207,000	2
52	TBD	
53	TBD	1
54	TBD	2
55	TBD	
56	4,500	5
57	TBD	
58	3,000	4
59	81,000	3
60	4,500	5

	AT	AV
1		
61	4,500	5
62	267,000	3
63	TBD	3
64	TBD	
65	42,000	2
66	216,000	2
67	117,000	2
68	4,500	2
69	4,500	2
70	4,500	2
71	3,000	2
72	4,500	2
73	4,500	3
74	61,000	3
75	4,500	4
76	4,500	5
77	22,000	1
78	22,000	
79	4,500	1
80	4,500	4
81	4,500	4
82	1,000	4
83	1,189,000	3
84	132,000	2
85	15,000	1
86	TBD	3
87	TBD	
88	4,500	5
89	TBD	3
90	3,000	4
91	4,500	5
92	23,000	2
93	7,000	5
94	TBD	4
95	3,000	4
96	3,000	4
97	4,500	
98	4,500	3
99	3,000	4
100	4,500	3
101	79,000	2
102	8,000	4
103	4,500	5
104	4,500	5
105	4,500	5
106	4,500	4
107	4,500	3
108	15,600	3
109	4,500	1
110	3,000	2
111	TBD	5
112	4,500	5
113	3,000	3
114	3,000	2
115	4,500	5
116	3,000	5
117	4,500	5
118	44,000	2
119	3,000	5

	AT	AV
1		
120	3,000	4
121	3,000	4
122	3,000	4
123	31,000	3
124	TBD	
125	TBD	1
126	TBD	2
127	TBD	2
128	TBD	2
129	TBD	
130	TBD	2
131	75,000	2
132	991,000	1
133	768,000	2
134	3,000	2
135	4,500	2
136	4,500	5
137	4,500	2
138	TBD	1
139	0	1
140	279,000	2
141	50,000	5
142	4,500	5
143	13,000	1
144	TBD	
145	10,500	5
146	123,000	1
147	137,000	1
148	TBD	
149	TBD	
150	TBD	
151	TBD	
152	5,000	5
153	3,000	3
154	3,000	1
155	3,000	1
156	4,500	2
157	120,000	4
158	4,500	5
159	10,000	4
160	TBD	1
161	TBD	2
162	TBD	
163	TBD	3
164	1,000,000	5
165	TBD	
166	TBD	3
167	TBD	3
168	TBD	5
169	TBD	
170	TBD	2
171	302,800	3
172	TBD	
173	TBD	
174	TBD	2
175	4,500	2
176	4,500	2
177	4,500	2
178	9,000	2
179	TBD	

	AT	AV
1		
180	4,500	2
181	TBD	1
182	4,500	5
183	TBD	1
184	TBD	3
185	56,000	3
186	TBD	5
187	TBD	
188	TBD	
189	TBD	
190	TBD	2
191	4,500	2
192	456,000	1
193	4,500	5
194	3,000	4
195	40,000	3
196	343,400	3
197	TBD	3
198	TBD	5
199	TBD	2
200	21,000	3
201	21,000	1
202	21,000	2
203	3,000	4
204	4,500	4
205	TBD	3
206	82,000	3
207	TBD	3
208	3,000	3
209	3,000	4
210	8,000	2
211	3,000	2
212	4,000	2
213	9,000	2
214	TBD	2
215	TBD	2
216	TBD	3
217	TBD	2
218	TBD	
219	TBD	
220	TBD	
221	250,000	4
222	3,000	3
223	TBD	2
224	TBD	2
225	TBD	2
226	3,000	5
227	4,500	2
228	4,500	5
229	4,500	5
230	TBD	1
231	TBD	4
232	55,000	4
233	TBD	3
234	TBD	
235	4,500	5
236	3,000	4
237	TBD	

	AT	AV
1		
238	58,000	2
239	4,500	5
240	TBD	
241	19,000	2
242	3,000	1
243	4,500	5
244	3,000	3
245	73,600	4
246	205,000	2
247	4,500	5
248	13,000	5
249	4,500	5
250	3,000	4
251	32,000	2
252	TBD	4
253	3,000	3
254	4,500	5
255		
256	11,577,400	
257		
258		

DRAFT TABLE 5.2

	A	B	C	D	E	AT	AV
1							
2	Street	FROM_Street	TO_Street	ROUTE_NUM	Secondary Route Number	Proj. Tot	FY
3							
4							
5							
13							
14	Marina Boulevard	Laguna Street	Lyon Street	02		120,000	4
15	North Point Street	Embarcadero, The	Van Ness Avenue	02		TBD	1
16	03rd Street	Cargo Way	Bayshore Boulevard	05		6,000	2
17	Bayshore Boulevard 2	Hester Avenue	San Mateo County Line	05		4,500	2
18	Embarcadero Promenade,The	North Point Street	King Street	05		3,000	4
19	Illinois Street A	16th Street	Mariposa Street	05		TBD	
20	Illinois Street B	Mariposa Street	18th Street	05		TBD	1
21	Illinois Street C	18th Street	19th Street	05		TBD	2
22	Illinois Street D	19th Street	20th Street	05		TBD	2
23	Illinois Street E	20th Street	22nd Street	05		TBD	2
24	Illinois Street F	22nd Street	25nd Street	05		TBD	
25	Illinois Street G	25th Street	Cesar Chavez Street	05		TBD	2
26	Illinois Street H	Marin Street	Islais Creek Bridge	05		75,000	2
27	Illinois Street I	Islais Creek Bridge	Islais Creek Bridge	05		991,000	1
28	Greenwich Street	Octavia Street	Lyon Street	06		3,000	2
29	Indiana Street	23rd Street	Cesar Chavez Street	07		768,000	2
30	Phelps Street	Oakdale Avenue	Palou Avenue	07	70	TBD	3
31	Broadway	Powell Street	Larkin Street	10	210	61,000	3
32	Lake Street	03rd Avenue	Arguello Boulevard	10		5,000	5
33	02nd Street	Market Street	Mission Street	11		19,000	1
34	02nd Street	Mission Street	Harrison Street	11		65,000	1
35	02nd Street	Harrison Street	Townsend Street	11		68,000	1
36	02nd Street	Townsend Street	King Street	11		5,000	2
37	03rd Street	China Basin Street	Cargo Way	11		1,000	1
38	Columbus Avenue	Washington Street	Northpoint Street	11		3,000	4
39	Post Street	Steiner Street	Market Street	16		3,000	3
40	Sutter Street	Market Street	Steiner Street	16		3,000	1
41	Stockton Street	Broadway	Market Street	17		TBD	
42	05th Street	Brannan Street	Townsend Street	19		135,000	1
43	05th Street	Mission Street	Harrison Street	19		405,000	1
44	05th Street	Market Street	Mission Street	19		139,000	4
45	05th Street	Harrison Street	Brannan Street	19		270,000	1
46	Fulton Street	Webster Street	Baker Street	20	45	15,600	3
47	Golden Gate Avenue	Parker Avenue	Masonic Avenue	20		TBD	5
48	Grove Street	Van Ness Avenue	Polk Street	20		3,000	5
49	McAllister Street	Market Street	Masonic Avenue	20		TBD	
50	McAllister Street	Baker Street	Polk Street	20		TBD	
51	Parker Avenue	Turk Street	Golden Gate Avenue	20		3,000	4
52	Mariposa Street	Pennsylvania	Indiana Street	23		4,500	5
53	Mississippi Street	16th Street	Mariposa Street	23		9,000	2
54	11th Street	Market Street	Mission Street	25		13,500	1
55	Bameveld Avenue	Loomis Street	Jerrold Avenue	25		3,000	4
56	Bayshore Boulevard 1A	Paul Avenue	Mansell Street	25		466,000	3
57	Bayshore Boulevard 1B	Fitzgerald Avenue	Paul Avenue	25		TBD	3
58	Bayshore Boulevard 1C	Silver Avenue	Fitzgerald Avenue	25		TBD	
59	Bayshore Boulevard 1D	Industrial Street	Silver Avenue	25		16,000	2
60	Bayshore Boulevard 1E	US101 Off_Ramp	IndustrialStreet	25		38,000	2
61	Bayshore Boulevard 1F	Cesar Chavez Street	US101 Off_Ramp	25		48,000	2
62	Bayshore Boulevard 2	Mansell Street	Hester Avenue	25	5	4,500	2
63	Industrial Street	Bayshore Boulevard	Loomis Street	25		3,000	2
64	Jerrold Avenue	Bameveld Avenue	Bayshore Boulevard	25		TBD	1
65	Loomis Street	Industrial Street	Bameveld Avenue	25		3,000	3
66	Polk Street A	Hayes Street	Market Street	25		3,000	2
67	Polk Street B	Lech Walesa	Hayes Street	25		1,000	2
68	Polk Street C	Grove Street	Lech Walesa	25		2,000	2
69	Polk Street D	McAllister Street	Grove Street	25		9,000	2
70	Potrero Avenue	Cesar Chavez Street	17th Street	25		TBD	2
71	Potrero Avenue	17th Street	Division Street	25		TBD	2
72	Potrero Avenue	23rd Street	23rd Street	25		TBD	2
73	14th Street	Market Street	Dolores Street	30		81,000	1
74	Fell Street	Masonic Avenue	Masonic Avenue	30		8,000	4
75	Hayes Street	Scott Street	Divisidero Street	30		3,000	5
76	Hayes Street	Broderick Street	Baker Street	30		3,000	4
77	Hayes Street	Divisidero Street	Broderick Street	30		3,000	4
78	John F Kennedy Drive	The Great Highway	Transverse Drive	30		0	1
79	John F Kennedy Drive	Transverse Drive	Stanyan Street	30		279,000	2
80	Wiggle,The	Church Street	Page Street	30		32,000	2
81	Page Street	Stanyan Street	Market Street	32		3,000	4
82	Page Street Path	East of Kezar Dr Path	Stanyan St (@Page)	32		40,000	3
83	Page/Stanyan	Page & Stanyan Sts	Page & Stanyan Sts	32		343,400	3
84	Division Street	Townsend Street	11th Street	36		3,000	4
85	Townsend Street	Embarcadero, The	02nd Street	36		3,000	3
86	Townsend Street	02nd Street	04th Street	36		73,600	4
87	Townsend Street	04th Street	Division Street	36		205,000	2
88	17th Street	Corbett Street	Market Street	40	50	3,000	2
89	Kirkham Street	Lower Great Hwy	The Great Highway	40		13,000	1
90	Kirkham Street	06th Avenue	The Great Highway	40		TBD	
91	22nd Street	Potrero Avenue	Chatanooga Street	44		3,000	3
92	Romain Street Overpass	Market Street (eastside)	Market Street C56(westside	44		TBD	1
93	29th Street	Dolores Street	Church Street	45		TBD	
94	30th Street	Dolores Street	Chenery Street	45	49	TBD	
95	Alemany Boulevard A	San Jose Avenue	Rousseau Street	45		265,000	2
96	Alemany Boulevard B	Rousseau Street	Couplet "Split" (Justin Dr.)	45		207,000	2

	A	B	C	D	E	AT	AV
1					Secondary		
97	Chenery Street	30th Street	Diamond Street	45		TBD	3
98	Dolores Street	29th Street	San Jose Avenue	45		3,000	4
99	Guerrero Street/San Jose Avenue	29th Street	Cesar Chavez Street	45		44,000	2
100	Lyell Street	Alemany Boulevard	Bosworth Street	45		3,000	1
101	McCoppin Bikeway	Market Street	Valencia Street	45		TBD	2
102	San Jose Avenue	Dolores Street	Chenery Street	45		TBD	4
103	29th Street	Sanchez Street	Church Street	49		TBD	
104	30th Street	Church Street	Whitney Street	49		TBD	2
105	30th Street	Chenery Street	Church Street	49		TBD	
106	30th Street	Whitney Street	Sanchez Street	49		TBD	
107	Church Street	29th Street	30th Street	49		TBD	
108	Sanchez Street	Day Street	30th Street	49		TBD	3
109	Sanchez Street	29th Street	Day Street	49		TBD	
110	Corbett Avenue	Clayton Street	17th Street	50	40	TBD	4
111	Market Street	8th Street	Van Ness Avenue	50		10,000	4
112	Market Street [eastbound] A,B,C	Noe Street	Sanchez Street	50		TBD	1
113	Market Street [eastbound] A,B,C	Church Street	Dolores Street	50		TBD	2
114	Market Street [eastbound] A,B,C	Castro Street	Noe Street	50		TBD	
115	Market Street [eastbound] D	Sanchez Street	Church Street	50		TBD	3
116	Market Street [eastbound] D,E	Dolores Street	Guerrero Street	50		1,000,000	5
117	Market Street [westbound] A,B,C	Buchannan Street	Church Street	50		TBD	3
118	Market Street [westbound] A,B,C	Church Street	Sanchez Street	50		TBD	3
119	Market Street [westbound] D,E	Octavia Street	Laguna Street	50		TBD	5
120	Market Street [westbound] D,E	Laguna Street	Buchannan Street	50		TBD	
121	Market Street [westbound] F,G	Sanchez Street	Noe Street	50		TBD	2
122	Portola Drive A	Saint Francis Boulevard	Santa Ana Avenue	50		TBD	2
123	Portola Drive B	Santa Ana Avenue	Santa Clara Avenue	50		TBD	3
124	Portola Drive C	Santa Clara Avenue	Waithman Way	50		TBD	2
125	Portola Drive D	Waithman Way	Sydney/Fowler Avenue	50		TBD	
126	Portola Drive E	Sydney Way / Fowler Aven	Twin Peaks Boulevard	50		TBD	
127	Portola Drive F	Twin Peaks Boulevard	Clipper Street	50		TBD	
128	Portola Drive G	Clipper Street	Corbett Avenue	50		250,000	4
129	Sloat Boulevard	19th Avenue	La Playa Street	50		TBD	
130	Sloat Boulevard	Great Highway, The	Skyline Blvd.	50		58,000	2
131	Bosworth St/O'Shaughnessy Blvd	San Jose Avenue	Portola Drive	55		3,000	2
132	Masonic Avenue	Page Street	Geary Boulevard	55		302,800	3
133	O'Shaughnessy Path	Portola Drive	Bosworth Street	55		456,000	1
134	Panhandle Path N-S @ Ashbury St	Oak Street	Panhandle Path(E-W)	55		21,000	3
135	Panhandle Path N-S @ Clayton St	Oak Street	Panhandle Path(E-W)	55		21,000	2
136	Presidio Boulevard	Pacific Avenue	Geary Boulevard	55		3,000	5
137	Cesar Chavez Street A	Guerrero Street	Sanchez Street	60		1,000	4
138	Cesar Chavez Street B	US101	Guerrero Street	60		1,189,000	3
139	Cesar Chavez Street C	Kansas Street (US101)	Mississippi (US280)	60		132,000	2
140	Laguna Honda Boulevard	Portola Drive	Dewey Boulevard	60		10,500	5
141	Vicente Path	Lower Great Highway	The Great Highway	60		13,000	5
142	Woodside Avenue	Portola Drive	Laguna Honda Boulevard	60		3,000	3
143	05th Ave Path	Martin Luther King Jr.Dr	Lincoln Way	65		16,000	5
144	07th Avenue	Kirkham Street	Lawton Street	65		16,000	1
145	Conservatory Drive East	Arguello Boulevard	John F Kennedy Drive	65		23,000	2
146	Conservatory Drive West	Arguello Boulevard	John F Kennedy Drive	65		7,000	5
147	Laguna Honda Boulevard	Forest Hills Muni Sta	Woodside Avenue	65		43,000	1
148	Laguna Honda Boulevard	Plaza Street	Forest Hills Muni Sta	65		47,000	1
149	Evans Avenue	03rd Street	Cesar Chavez Street	68		79,000	2
150	Monterey Boulevard	San Jose Avenue	Junipero Serra	70		TBD	
151	Oakdale Avenue	Phelps Street	03rd Street	70	170	TBD	1
152	Oakdale Avenue	Loomis Street	Barneveld Avenue	70	170	TBD	3
153	Oakdale Avenue	IndustrialStreet	US280/Selby (southeast sid	70	170	56,000	3
154	Oakdale Avenue	Bayshore Boulevard	Loomis Street	70	170	TBD	5
155	Oakdale Avenue	Barneveld Avenue	IndustrialStreet	70	170	TBD	
156	Palou Avenue	Newhall Street	Phelps Street	70	07	TBD	3
157	Palou Avenue	03rd Street	Newhall Street	70	07	TBD	5
158	Silver Avenue	Alemany Boulevard	Oakdale Aveune	70		3,000	4
159	19th Avenue	Holloway Avenue	Buckingham Way	75		178,000	5
160	20th Avenue	Wawona Street	Lincoln Way	75		83,000	1
161	Buckingham Way	19th Avenue	20th Street Avenue	75		22,000	1
162	Buckingham Way	20th Avenue	21st Street Avenue	75		22,000	
163	20st Avenue	Sloat Boulevard	Buckingham Way	76		TBD	
164	Ocean Avenue	Mission Street	Junipero Serra	84	90	TBD	
165	34th Ave Path	Polo Fields Path	MLK Dr	85		37,000	2
166	Lake Merced Boulevard	Skyline Boulevard	John Muir Drive	85	0	TBD	
167	Lake Merced Boulevard	Skyline Boulevard	John Muir Drive	85		TBD	
168	Polo Field Bike Path	Polo Field	34th Avenue Path	85		TBD	2
169	Sunset Path	Ocean Avenue	Lake Merced Blvd	85		19,000	2
170	Winston Drive	Junipero Serra Boulevard	Lake Merced Boulevard	86		TBD	4
171	Geneva Avenue	Ocean Avenue	Paris Street	90		3,000	2
172	Holloway Avenue	19th Avenue	Plymouth Avenue	90		3,000	4
173	Plymouth Avenue	Ocean Avenue	Holloway Avenue	90		3,000	3
174	John Muir Drive	Lake Merced Blvd	Syline Drive	91	885	50,000	5
175	Lake Merced Path	Westem Portion (N-S)		91		TBD	
176	Great Highway,The	Balboa Street	Point Lobos Avenue	95		3,000	3
177	Point Lobos Avenue	Great Highway, The	48th Avenue	95		3,000	4
178	Battery East Path	Lincoln Boulevard	Golden Gate Bridge	202		81,000	3
179	Webster Street	Hermann Street+B182	Grove Street	345		3,000	4
180	Mansell Street	San Bruno Avenue	University Street	705		3,000	1
181	Chain of Lakes Dr West	Chain of Lakes Dr East	Bercut Equitation Fld	730		15,000	1
182	Horseshoe Court Path	Fulton Street	Conservatory Dr East	765		31,000	3
183	Phelan Avenue	Judson Avenue	Ocean Avenue	770	70	82,000	3
184	Lake Merced Path	Northern Portion (E-W)	Eastem Portion (N-S)	885	85/86/91/95	TBD	
185	15th Street	Market Street	Harrison Street	n/a		4,500	3

	A	B	C	D	E	AT	AV
1					Secondary		
186	16th Street	Market Street	South Van Ness Ave	n/a		706,000	1
187	16th Street	South Van Ness Avenue	Bryant Street	n/a		316,000	3
188	17th Street	Market Street	Harrison Street	n/a		TBD	
189	17th Street	Harrison Street	Potrero Avenue	n/a		TBD	
190	17th Street	Potrero Avenue	Kansas Street	n/a		TBD	
191	18th Street	Diamond	Harrison Street	n/a		TBD	5
192	23rd Street	Valencia Street	San Bruno	n/a		4,500	5
193	25th Avenue	Lincoln Way	Kirkham Street	n/a		4,500	5
194	26th Street	Valencia Street	Hampshire Street	n/a		4,500	5
195	Baker Street	Turk Street	Sacramento	n/a		4,500	5
196	Battery Street	Embarcadero, The	Market Street	n/a		4,500	5
197	Bay Street	Embarcadero, The	Fillmore Street	n/a		4,500	5
198	Beach Street	Van Ness Avenue	the Embarcadero	n/a		4,500	2
199	Bosworth Street	Cayuga Avenue	Alemany Boulevard	n/a		4,500	2
200	Brannan Street	Embarcadero, The	Division Street	n/a		4,500	3
201	Broderick Street	Francisco Street	Marina Boulevard	n/a		4,500	4
202	Brotherhood Way	Lake Merced	Arch Street	n/a		4,500	5
203	California Street	Masonic Avenue	Van Ness Avenue	n/a		4,500	1
204	Capp Street	26th Street	15th Street	n/a		4,500	4
205	Cargo Way	End	03rd Street	n/a		4,500	4
206	Circular Avenue	Monterey Boulevard	Havelock	n/a		4,500	5
207	Columbus Avenue	Northpoint Street	Beach Street	n/a		4,500	5
208	Duboce Avenue	Valencia Street	Market Street	n/a		4,500	
209	Duboce Park	Noe Street	Waller Street	n/a		4,500	3
210	Embarcadero, The	Northpoint Street	Taylor Street	n/a		4,500	3
211	Fell Street	Scott Street	Baker Street	n/a		4,500	5
212	Fort Mason Tunnel	Aquatic Park	Laguna Street	n/a		4,500	5
213	Francisco Street	Octavia Street	Laguna Street	n/a		4,500	5
214	Fremont Street	Howard Street	Harrison Street	n/a		4,500	4
215	Front Street	Green Street	Jackson Street	n/a		4,500	3
216	Geary Boulevard	Divisadero	25th Avenue	n/a		4,500	1
217	Golden Gate Avenue	Baker Street	Market Street	n/a		4,500	5
218	Greenwich Street	Polk Street	Octavia Street	n/a		4,500	5
219	Grove Street	Scott Street	Baker Street	n/a		4,500	5
220	Industrial Street	Oakdale Avenue	Loomis Street	n/a		4,500	2
221	Jefferson Street	Embarcadero, The	Larkin Street	n/a		4,500	5
222	Jennings Street	Evans Avenue	Cargo Way	n/a		4,500	2
223	Kearny Street	Market Street	Columbus Avenue	n/a		4,500	5
224	Mansell Street	University Street	Persia Street	n/a		4,500	2
225	Mendell Street	Palou Street	Oakdale Aveune	n/a		4,500	2
226	Mission Street Creek Bikeway	16th Street	04th Street	n/a		4,500	2
227	Noriega Street	La Playa Street	19th Avenue	n/a		4,500	2
228	Oak Street	Scott Street	Baker Street	n/a		4,500	5
229	O'Farrell	Polk Street	Market Street	n/a		4,500	2
230	Pacific Avenue	Polk Street	Steiner Street	n/a		4,500	5
231	Panhandle Path N-S @ Baker St	Oak Street	Panhandle Path(E-W)	n/a		21,000	1
232	Perimeter Path	Avenue of the Palms		n/a		4,500	4
233	Randolph Street	Ralston Street	Saint Charles Avenue	n/a		4,500	2
234	Randolph Street	Vernon Street	Ralston Street	n/a		4,500	5
235	Randolph Street	Arch Street	Vernon Street	n/a		4,500	5
236	Shotwell Street	14th Street	26th Street	n/a		4,500	5
237	Stanyan Street	Fulton Street	Frederick	n/a		4,500	5
238	Terry Francois Boulevard	China Basin Street	Illinois Street	n/a		4,500	5
239	Union Street	Steiner Street	Van Ness Avenue	n/a		4,500	5
240	Washington Street	Embarcadero, The	Columbus Avenue	n/a		4,500	5
241	Yosemite Avenue	03rd Street	Baytrail	n/a		4,500	5
242	Mission Street	Embarcadero, The	14th Street	n/a		4,500	2
243	Alemany Boulevard C	Couplet "Split"(n.of Justin D	Putnam Street			TBD	
244	Alemany Boulevard D	Putnam Street	101/280			TBD	1
245	Alemany Boulevard E	Alemany Circle	Alemany Circle			TBD	2
246	Ashbury Street	Page Street	Panhandle Path			TBD	
247	Baker Street	Page Street	Panhandle Path			TBD	
248	Clayton Street	Page Street	Panhandle Path			TBD	3
249	Market Street [westbound]	Noe Street	17th Street			TBD	
250	Ocean Avenue					TBD	
251	Octavia Boulevard	McChoppin Bikeway	Hayes Green			TBD	2
252	Panhandle Path E-W @ Masonic Avenue	East Side of Masonic Avenue Intersection	West Side of Masonic Avenue Intersection			TBD	2
253	Persia Street	Mansell Street	Ocean Avenue			TBD	3
254	San Jose Avenue	Randall Street	29th Street			55,000	4

DRAFT TABLE 5.3

	A	B	C	D	E	AT	AV
1							
2	Street	FROM_Street	TO_Street	ROUTE_NUM	Secondary Route Number	Proj. Tot	FY
3							
4							
5							
13							
14	02nd Street	Market Street	Mission Street	11		19,000	1
15	02nd Street	Mission Street	Harrison Street	11		67,000	1
16	02nd Street	Harrison Street	Townsend Street	11		70,000	1
17	03rd Street	China Basin Street	Cargo Way	11		1,000	1
18	05th Street	Brannan Street	Townsend Street	19		20,000	1
19	05th Street	Mission Street	Harrison Street	19		58,000	1
20	05th Street	Harrison Street	Brannan Street	19		39,000	1
21	07th Avenue	Kirkham Street	Lawton Street	65		16,000	1
22	11th Street	Market Street	Mission Street	25		13,500	1
23	14th Street	Market Street	Dolores Street	30		81,000	1
24	16th Street	Market Street	South Van Ness Ave	n/a		1,041,000	1
25	20th Avenue	Wawona Street	Lincoln Way	75		83,000	1
26	Alemany Boulevard D	Putnam Street	101/280			TBD	1
27	Buckingham Way	19th Avenue	20th Street Avenue	75		22,000	1
28	California Street	Masonic Avenue	Van Ness Avenue	n/a		4,500	1
29	Chain of Lakes Dr West	Chain of Lakes Dr East	Bercut Equitation Fld	730		15,000	1
30	Geary Boulevard	Divisadero	25th Avenue	n/a		4,500	1
31	Illinois Street B	Mariposa Street	18th Street	05		TBD	1
32	Illinois Street I	Islais Creek Bridge	Islais Creek Bridge	05		991,000	1
33	Jerrold Avenue	Bameveld Avenue	Bayshore Boulevard	25		TBD	1
34	John F Kennedy Drive	The Great Highway	Transverse Drive	30		0	1
35	Kirkham Street	Lower Great Hwy	The Great Highway	40		13,000	1
36	Laguna Honda Boulevard	Forest Hills Muni Sta	Woodside Avenue	65		22,000	1
37	Laguna Honda Boulevard	Plaza Street	Forest Hills Muni Sta	65		23,000	1
38	Lyell Street	Alemany Boulevard	Bosworth Street	45		3,000	1
39	Mansell Street	San Bruno Avenue	University Street	705		3,000	1
40	Market Street [eastbound] A,B,C	Noe Street	Sanchez Street	50		TBD	1
41	North Point Street	Embarcadero, The	Van Ness Avenue	02		TBD	1
42	Oakdale Avenue	Phelps Street	03rd Street	70	170	TBD	1
43	O'Shaughnessy Path	Portola Drive	Bosworth Street	55		456,000	1
44	Panhandle Path N-S @ Baker St	Oak Street	Panhandle Path(E-W)	n/a		21,000	1
45	Romain Street Overpass	Market Street (eastside)	Market Street C56(westside	44		TBD	1
46	Sutter Street	Market Street	Steiner Street	16		3,000	1
47	02nd Street	Townsend Street	King Street	11		5,000	2
48	03rd Street	Cargo Way	Bayshore Boulevard	05		6,000	2
49	17th Street	Corbett Street	Market Street	40	50	3,000	2
50	30th Street	Church Street	Whitney Street	49		TBD	2
51	34th Ave Path	Polo Fields Path	MLK Dr	85		37,000	2
52	Alemany Boulevard A	San Jose Avenue	Rousseau Street	45		265,000	2
53	Alemany Boulevard B	Rousseau Street	Couplet "Split" (Justin Dr.)	45		207,000	2
54	Alemany Boulevard E	Alemany Circle	Alemany Circle			TBD	2
55	Bayshore Boulevard 1D	Industrial Street	Silver Avenue	25		0	2
56	Bayshore Boulevard 1E	US101 Off_Ramp	IndustrialStreet	25		315,000	2
57	Bayshore Boulevard 1F	Cesar Chavez Street	US101 Off_Ramp	25		261,000	2
58	Bayshore Boulevard 2	Hester Avenue	San Mateo County Line	05		4,500	2
59	Bayshore Boulevard 2	Mansell Street	Hester Avenue	25	5	4,500	2
60	Beach Street	Van Ness Avenue	the Embarcadero	n/a		4,500	2
61	Bosworth St/O'Shaughnessy Blvd	San Jose Avenue	Portola Drive	55		3,000	2
62	Bosworth Street	Cayuga Avenue	Alemany Boulevard	n/a		4,500	2
63	Cesar Chavez Street C	Kansas Street (US101)	Mississippi (US280)	60		132,000	2
64	Conservatory Drive East	Arguello Boulevard	John F Kennedy Drive	65		23,000	2
65	Evans Avenue	03rd Street	Cesar Chavez Street	68		79,000	2
66	Geneva Avenue	Ocean Avenue	Paris Street	90		3,000	2
67	Greenwich Street	Octavia Street	Lyon Street	06		3,000	2
68	Guerrero Street/San Jose Avenue	29th Street	Cesar Chavez Street	45		44,000	2
69	Illinois Street C	18th Street	19th Street	05		TBD	2
70	Illinois Street D	19th Street	20th Street	05		TBD	2
71	Illinois Street E	20th Street	22nd Street	05		TBD	2
72	Illinois Street G	25th Street	Cesar Chavez Street	05		TBD	2
73	Illinois Street H	Marin Street	Islais Creek Bridge	05		75,000	2
74	Indiana Street	23rd Street	Cesar Chavez Street	07		768,000	2
75	Industrial Street	Bayshore Boulevard	Loomis Street	25		3,000	2
76	Industrial Street	Oakdale Avenue	Loomis Street	n/a		4,500	2
77	Jennings Street	Evans Avenue	Cargo Way	n/a		4,500	2
78	John F Kennedy Drive	Transverse Drive	Stanyan Street	30		279,000	2
79	Mansell Street	University Street	Persia Street	n/a		4,500	2
80	Market Street [eastbound] A,B,C	Church Street	Dolores Street	50		TBD	2
81	Market Street [westbound] F,G	Sanchez Street	Noe Street	50		TBD	2
82	McCoppin Bikeway	Market Street	Valencia Street	45		TBD	2
83	Mendell Street	Palou Street	Oakdale Aveune	n/a		4,500	2
84	Mission Street	Embarcadero, The	14th Street	n/a		4,500	2
85	Mission Street Creek Bikeway	16th Street	04th Street	n/a		4,500	2
86	Mississippi Street	16th Street	Mariposa Street	23		9,000	2
87	Noriega Street	La Playa Street	19th Avenue	n/a		4,500	2
88	Octavia Boulevard	McChoppin Bikeway	Hayes Green			TBD	2
89	O'Farrell	Polk Street	Market Street	n/a		4,500	2
90	Panhandle Path E-W @ Masonic Avenue	East Side of Masonic Avenue Intersection	West Side of Masonic Avenue Intersection			TBD	2
91	Panhandle Path N-S @ Clayton St	Oak Street	Panhandle Path(E-W)	55		21,000	2
92	Polk Street A	Hayes Street	Market Street	25		3,000	2
93	Polk Street B	Lech Walesa	Hayes Street	25		1,000	2
94	Polk Street C	Grove Street	Lech Walesa	25		2,000	2
95	Polk Street D	McAllister Street	Grove Street	25		9,000	2

	A	B	C	D	E	AT	AV
1					Secondary		
96	Polo Field Bike Path	Polo Field	34th Avenue Path	85		TBD	2
97	Portola Drive A	Saint Francis Boulevard	Santa Ana Avenue	50		TBD	2
98	Portola Drive C	Santa Clara Avenue	Waithman Way	50		TBD	2
99	Potrero Avenue	Cesar Chavez Street	17th Street	25		TBD	2
100	Potrero Avenue	17th Street	Division Street	25		TBD	2
101	Potrero Avenue	23rd Street	23rd Street	25		TBD	2
102	Randolph Street	Ralston Street	Saint Charles Avenue	n/a		4,500	2
103	Sloat Boulevard	Great Highway, The	Skyline Blvd.	50		58,000	2
104	Sunset Path	Ocean Avenue	Lake Merced Blvd	85		19,000	2
105	Townsend Street	04th Street	Division Street	36		205,000	2
106	Wiggle,The	Church Street	Page Street	30		32,000	2
107	15th Street	Market Street	Harrison Street	n/a		4,500	3
108	16th Street	South Van Ness Avenue	Bryant Street	n/a		465,000	3
109	22nd Street	Potrero Avenue	Chatanooga Street	44		3,000	3
110	Battery East Path	Lincoln Boulevard	Golden Gate Bridge	202		81,000	3
111	Bayshore Boulevard 1A	Paul Avenue	Mansell Street	25		33,000	3
112	Bayshore Boulevard 1B	Fitzgerald Avenue	Paul Avenue	25		TBD	3
113	Brannan Street	Embarcadero, The	Division Street	n/a		4,500	3
114	Broadway	Powell Street	Larkin Street	10	210	61,000	3
115	Cesar Chavez Street B	US101	Guerrero Street	60		1,189,000	3
116	Chenery Street	30th Street	Diamond Street	45		TBD	3
117	Clayton Street	Page Street	Panhandle Path			TBD	3
118	Duboce Park	Noe Street	Waller Street	n/a		4,500	3
119	Embarcadero, The	Northpoint Street	Taylor Street	n/a		4,500	3
120	Front Street	Green Street	Jackson Street	n/a		4,500	3
121	Fulton Street	Webster Street	Baker Street	20	45	15,600	3
122	Great Highway,The	Balboa Street	Point Lobos Avenue	95		3,000	3
123	Horseshoe Court Path	Fulton Street	Conservatory Dr East	765		31,000	3
124	Loomis Street	Industrial Street	Bameveld Avenue	25		3,000	3
125	Market Street [eastbound] D	Sanchez Street	Church Street	50		TBD	3
126	Market Street [westbound] A,B,C	Buchannan Street	Church Street	50		TBD	3
127	Market Street [westbound] A,B,C	Church Street	Sanchez Street	50		TBD	3
128	Masonic Avenue	Page Street	Geary Boulevard	55		302,800	3
129	Oakdale Avenue	Loomis Street	Bameveld Avenue	70	170	TBD	3
130	Oakdale Avenue	IndustrialStreet	US280/Selby (southeast sid	70	170	56,000	3
131	Page Street Path	East of Kezar Dr Path	Stanyan St (@Page)	32		40,000	3
132	Page/Stanyan	Page & Stanyan Sts	Page & Stanyan Sts	32		343,400	3
133	Palou Avenue	Newhall Street	Phelps Street	70	07	TBD	3
134	Panhandle Path N-S @ Ashbury St	Oak Street	Panhandle Path(E-W)	55		21,000	3
135	Persia Street	Mansell Street	Ocean Avenue			TBD	3
136	Phelan Avenue	Judson Avenue	Ocean Avenue	770	70	82,000	3
137	Phelps Street	Oakdale Avenue	Palou Avenue	07	70	TBD	3
138	Plymouth Avenue	Ocean Avenue	Holloway Avenue	90		3,000	3
139	Portola Drive B	Santa Ana Avenue	Santa Clara Avenue	50		TBD	3
140	Post Street	Steiner Street	Market Street	16		3,000	3
141	Sanchez Street	Day Street	30th Street	49		TBD	3
142	Townsend Street	Embarcadero, The	02nd Street	36		3,000	3
143	Woodside Avenue	Portola Drive	Laguna Honda Boulevard	60		3,000	3
144	05th Street	Market Street	Mission Street	19		18,000	4
145	Bameveld Avenue	Loomis Street	Jerrold Avenue	25		3,000	4
146	Broderick Street	Francisco Street	Marina Boulevard	n/a		4,500	4
147	Capp Street	26th Street	15th Street	n/a		4,500	4
148	Cargo Way	End	03rd Street	n/a		4,500	4
149	Cesar Chavez Street A	Guerrero Street	Sanchez Street	60		1,000	4
150	Columbus Avenue	Washington Street	Northpoint Street	11		3,000	4
151	Corbett Avenue	Clayton Street	17th Street	50	40	TBD	4
152	Division Street	Townsend Street	11th Street	36		3,000	4
153	Dolores Street	29th Street	San Jose Avenue	45		3,000	4
154	Embarcadero Promenade,The	North Point Street	King Street	05		3,000	4
155	Fell Street	Masonic Avenue	Masonic Avenue	30		8,000	4
156	Fremont Street	Howard Street	Harrison Street	n/a		4,500	4
157	Hayes Street	Broderick Street	Baker Street	30		3,000	4
158	Hayes Street	Divisidero Street	Broderick Street	30		3,000	4
159	Holloway Avenue	19th Avenue	Plymouth Avenue	90		3,000	4
160	Marina Boulevard	Laguna Street	Lyon Street	02		120,000	4
161	Market Street	8th Street	Van Ness Avenue	50		10,000	4
162	Page Street	Stanyan Street	Market Street	32		3,000	4
163	Parker Avenue	Turk Street	Golden Gate Avenue	20		3,000	4
164	Perimeter Path	Avenue of the Palms		n/a		4,500	4
165	Point Lobos Avenue	Great Highway, The	48th Avenue	95		3,000	4
166	Portola Drive G	Clipper Street	Corbett Avenue	50		250,000	4
167	San Jose Avenue	Dolores Street	Chenery Street	45		TBD	4
168	San Jose Avenue	Randall Street	29th Street			55,000	4
169	Silver Avenue	Alemany Boulevard	Oakdale Aveune	70		3,000	4
170	Townsend Street	02nd Street	04th Street	36		73,600	4
171	Webster Street	Hermann Street+B182	Grove Street	345		3,000	4
172	Winston Drive	Junipero Serra Boulevard	Lake Merced Boulevard	86		TBD	4
173	05th Ave Path	Martin Luther King Jr.Dr	Lincoln Way	65		16,000	5
174	18th Street	Diamond	Harrison Street	n/a		TBD	5
175	19th Avenue	Holloway Avenue	Buckingham Way	75		178,000	5
176	23rd Street	Valencia Street	San Bruno	n/a		4,500	5
177	25th Avenue	Lincoln Way	Kirkham Street	n/a		4,500	5
178	26th Street	Valencia Street	Hampshire Street	n/a		4,500	5
179	Baker Street	Turk Street	Sacramento	n/a		4,500	5
180	Battery Street	Embarcadero, The	Market Street	n/a		4,500	5
181	Bay Street	Embarcadero, The	Fillmore Street	n/a		4,500	5
182	Brotherhood Way	Lake Merced	Arch Street	n/a		4,500	5
183	Circular Avenue	Monterey Boulevard	Havelock	n/a		4,500	5
184	Columbus Avenue	Northpoint Street	Beach Street	n/a		4,500	5

	A	B	C	D	E	AT	AV
1					Secondary		
185	Conservatory Drive West	Arguello Boulevard	John F Kennedy Drive	65		7,000	5
186	Fell Street	Scott Street	Baker Street	n/a		4,500	5
187	Fort Mason Tunnel	Aquatic Park	Laguna Street	n/a		4,500	5
188	Francisco Street	Octavia Street	Laguna Street	n/a		4,500	5
189	Golden Gate Avenue	Parker Avenue	Masonic Avenue	20		TBD	5
190	Golden Gate Avenue	Baker Street	Market Street	n/a		4,500	5
191	Greenwich Street	Polk Street	Octavia Street	n/a		4,500	5
192	Grove Street	Van Ness Avenue	Polk Street	20		3,000	5
193	Grove Street	Scott Street	Baker Street	n/a		4,500	5
194	Hayes Street	Scott Street	Divisidero Street	30		3,000	5
195	Jefferson Street	Embarcadero, The	Larkin Street	n/a		4,500	5
196	John Muir Drive	Lake Merced Blvd	Syline Drive	91	885	50,000	5
197	Kearny Street	Market Street	Columbus Avenue	n/a		4,500	5
198	Laguna Honda Boulevard	Portola Drive	Dewey Boulevard	60		10,500	5
199	Lake Street	03rd Avenue	Arguello Boulevard	10		5,000	5
200	Mariposa Street	Pennsylvania	Indiana Street	23		4,500	5
201	Market Street [eastbound] D,E	Dolores Street	Guerrero Street	50		1,000,000	5
202	Market Street [westbound] D,E	Octavia Street	Laguna Street	50		TBD	5
203	Oak Street	Scott Street	Baker Street	n/a		4,500	5
204	Oakdale Avenue	Bayshore Boulevard	Loomis Street	70	170	TBD	5
205	Pacific Avenue	Polk Street	Steiner Street	n/a		4,500	5
206	Palou Avenue	03rd Street	Newhall Street	70	07	TBD	5
207	Presidio Boulevard	Pacific Avenue	Geary Boulevard	55		3,000	5
208	Randolph Street	Vernon Street	Ralston Street	n/a		4,500	5
209	Randolph Street	Arch Street	Vernon Street	n/a		4,500	5
210	Shotwell Street	14th Street	26th Street	n/a		4,500	5
211	Stanyan Street	Fulton Street	Frederick	n/a		4,500	5
212	Terry Francois Boulevard	China Basin Street	Illinois Street	n/a		4,500	5
213	Union Street	Steiner Street	Van Ness Avenue	n/a		4,500	5
214	Vicente Path	Lower Great Highway	The Great Highway	60		13,000	5
215	Washington Street	Embarcadero, The	Columbus Avenue	n/a		4,500	5
216	Yosemite Avenue	03rd Street	Baytrail	n/a		4,500	5
217	17th Street	Market Street	Harrison Street	n/a		TBD	
218	17th Street	Harrison Street	Potrero Avenue	n/a		TBD	
219	17th Street	Potrero Avenue	Kansas Street	n/a		TBD	
220	20st Avenue	Sloat Boulevard	Buckingham Way	76		TBD	
221	29th Street	Dolores Street	Church Street	45		TBD	
222	29th Street	Sanchez Street	Church Street	49		TBD	
223	30th Street	Dolores Street	Chenery Street	45	49	TBD	
224	30th Street	Chenery Street	Church Street	49		TBD	
225	30th Street	Whitney Street	Sanchez Street	49		TBD	
226	Alemany Boulevard C	Couplet "Split"(n.of Justin D	Putnam Street			TBD	
227	Ashbury Street	Page Street	Panhandle Path			TBD	
228	Baker Street	Page Street	Panhandle Path			TBD	
229	Bayshore Boulevard 1C	Silver Avenue	Fitzgerald Avenue	25		TBD	
230	Buckingham Way	20th Avenue	21st Street Avenue	75		22,000	
231	Church Street	29th Street	30th Street	49		TBD	
232	Duboce Avenue	Valencia Street	Market Street	n/a		4,500	
233	Illinois Street A	16th Street	Mariposa Street	05		TBD	
234	Illinois Street F	22nd Street	25nd Street	05		TBD	
235	Kirkham Street	06th Avenue	The Great Highway	40		TBD	
236	Lake Merced Boulevard	Skyline Boulevard	John Muir Drive	85	0	TBD	
237	Lake Merced Boulevard	Skyline Boulevard	John Muir Drive	85		TBD	
238	Lake Merced Path	Western Portion (N-S)		91		TBD	
239	Lake Merced Path	Northern Portion (E-W)	Eastern Portion (N-S)	885	85/86/91/95	TBD	
240	Market Street [eastbound] A,B,C	Castro Street	Noe Street	50		TBD	
241	Market Street [westbound]	Noe Street	17th Street			TBD	
242	Market Street [westbound] D,E	Laguna Street	Buchannan Street	50		TBD	
243	McAllister Street	Market Street	Masonic Avenue	20		TBD	
244	McAllister Street	Baker Street	Polk Street	20		TBD	
245	Monterey Boulevard	San Jose Avenue	Junipero Serra	70		TBD	
246	Oakdale Avenue	Bameveld Avenue	IndustrialStreet	70	170	TBD	
247	Ocean Avenue	Mission Street	Junipero Serra	84	90	TBD	
248	Ocean Avenue					TBD	
249	Portola Drive D	Waithman Way	Sydney/Fowler Avenue	50		TBD	
250	Portola Drive E	Sydney Way / Fowler Aven	Twin Peaks Boulevard	50		TBD	
251	Portola Drive F	Twin Peaks Boulevard	Clipper Street	50		TBD	
252	Sanchez Street	29th Street	Day Street	49		TBD	
253	Sloat Boulevard	19th Avenue	La Playa Street	50		TBD	
254	Stockton Street	Broadway	Market Street	17		TBD	

9.0 APPENDIX

a. Consultant Project Summary Sheets

SUMMARY SHEET OUTLINE

2ND STREET, MARKET TO TOWNSEND

Project Description

Second Street is a high volume downtown street in the SOMA section of San Francisco. Bicycle improvements to Second Street would provide an important connection between Market Street and Pac Bell Park in the South Beach section. It would also connect bicyclists with bike routes on Howard, Folsom, Townsend, and King Streets. The street also provides important connections for motor vehicles, trucks, and transit.

Second Street generally has two lanes of travel in each direction with parking on both sides of the street. The street serves residential and retail uses. The street is 52' 6" wide between Market and Harrison Street, and between King and Townsend Streets, and widens to 62' 6" between Harrison and Townsend Streets. To allow for the installation of bike lanes, one travel lane would need to be removed in each direction in the 52'6" wide section, and one of the four travel lanes would need to be removed from the section south of Harrison, except between Townsend and King Streets.

History/Background

Second Street was identified as a part of the comprehensive bicycle route network developed for the San Francisco Bicycle Plan, which was approved by the SF Board of Supervisors in 1997. In 1998, the DPT studied the potential installation of bike lanes on Second and looked at the impacts of bike lane removal to provide bike lanes. The lane removals were reviewed, but not approved by the Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT). The project was reviewed by the Parking and Traffic Commission, who also voted against the project.

DPT's West Approach Retrofit Project in SOMA will affect Second Street. This project will close streets under the freeway and alter the lane configurations. The project will be completed in 2008.

Second Street is currently identified as the preferred alignment for possible rail extension from the current Caltrain Station to the Transbay Terminal. The potential for redesign of the entire street is possible if construction of the extension is approved and excavation for the new tunnel is used instead of boring.

Design Segments

- Market to Mission: Currently, there are three travel lanes (2 southbound and 1 northbound) and parallel parking on both sides of the street. Bike lanes could be provided on this segment if one of the southbound travel lanes is removed.

- Mission to Harrison: This segment has two travel lanes in each direction and parallel on-street parking. While the width of the street is the same as the previous section, there is an additional northbound travel lane. Thus, the travel and parking lane widths are narrower.

- Harrison to Townsend: This segment currently has two travel lanes in each direction and parallel on-street parking on both sides of the street. The street is 62'6" wide in this section, so only one lane of travel would need to be removed. Based on traffic volumes and demand, removal of the southbound lane would be preferable.

- Townsend to King: This segment has two southbound lanes at King Street (a left- and right-turn only lane), one northbound lane, and on-street parking on both sides of the street and is 52' 6"" wide. A northbound bike lane could be striped the entire length, with a southbound bike lane leading into the turn lanes. No lanes or parking would have to be removed.

Capacity

- The traffic operations impact associated with travel lane removal in Option 1 was studied by DPT in 1998. Previous analysis should be referred to or updated with new counts as needed. Loss of capacity on 2nd Street may result in severe congestion in some sections.

Transit

- MUNI operates the 15, 9, 71, and 10 bus lines on Second Street. Due to lane removal, bus service will likely be affected because of the reduction in capacity.

Bus Route	From	To	Service Frequency At PM Peak
15	Market	Brannan	7 minutes
9	Market	Mission	8 minutes
71	Market	Mission	10 minutes
10	Howard	Townsend	10 minutes

- There is currently a heavy left turn volume from 2nd Street onto Folsom Street. This must be addressed for period until bridge traffic is modified to ensure that transit is not negatively impacted by proposed travel lane reductions. Alternative designs should include a left-turn pocket or other treatment to allow through traffic to flow through while vehicles are waiting to turn left.

Parking

- Because there is high demand for parking on Second Street, on-street parking will not be removed or affected in Option 1. Options requiring parking removal are not recommended.

Pedestrian Concerns

- The proposed bicycle improvements benefit pedestrians by decreasing the effective crossing distance across Second Street. While the curb-to-curb distance will remain constant, the number of travel lanes will be reduced, so crossing at signalized or unprotected crosswalks will be simplified.

Land Use

- The land use along Second Street is comprised of a mix of residential, office, and retail. No land use conflicts would be associated with the proposed changes.

Other Departments or Agencies

- MUNI should be involved with the development of plans on 2nd Street that may affect their service.

Next Steps

- Capacity analyses associated with the travel lane reductions should be conducted by DPT.
- Parking supply and demand should be determined for areas where removal of a parking lane is the preferred design.

1. 2nd between Market and Mission, looking southeast. The redevelopment plan for this area calls for widening the sidewalks to improve the pedestrian environment.

2. Photo to be replaced

3. 2nd at Mission, looking southeast. This section (between Market and Harrison) is 52 feet wide.

4. 2nd between Mission and Howard, looking southeast. Shared-lane markings are being tested on 2nd Street.

5. 2nd and Harrison, looking southeast. 2nd Street accomodates both MUNI and SamTrans bus service. South of Harrison, the street widens to 62 feet.

6. 2nd between Harrison and Bryant, looking northwest. Bike improvements will need to account for dedicated turn-lanes.

7. 2nd Street approaching Brannan, looking southeast. A "Bicycles Allowed Use of Full Lane" has been posted here. Trucks use Brannan to access the Bay Bridge.

8. 2nd, approaching Townsend, looking southeast. 2nd provides a connection to Pac Bell Park and the Embarcadero.

SF BIKE PLAN UPDATE

2nd Street

Market St. to Townsend St.

This draft diagram is designed for public input and discussion purposes.
This is a representative diagram and is not based on actual survey data.
All information presented in this diagram is subject to modification.

DRAFT 11/26/03

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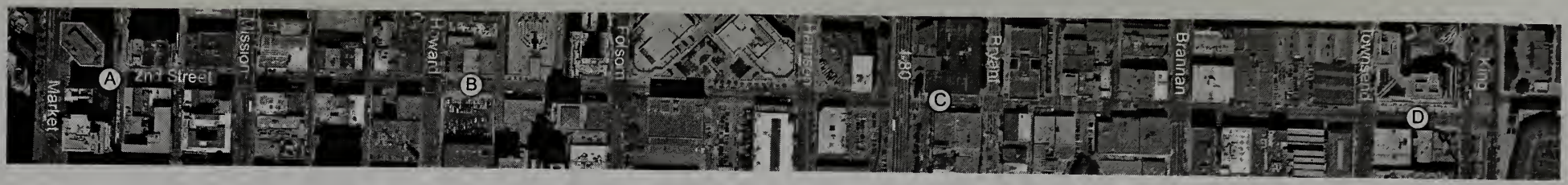
SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

2nd Street Existing Conditions Sheet 1 of 1 (Market to Townsend)
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets



Street Cross-Section Typicals (looking southeast towards Townsend)

	Ⓐ Market to Mission	Ⓑ Mission to Harrison	Ⓒ Harrison to Townsend	Ⓓ Townsend to King
Existing	20'3" | 12' | 20'3"	17' | 9'3" | 9'3" | 17'	21'3" | 10' | 10' | 21'3"	26'3" | 26'3"
Option 1	9' | 6' | 11'3" | 11'3" | 6' | 9'	9' | 6' | 11'3" | 11'3" | 6' | 9'	9'3" | 6' | 11' | 11' | 11'3" | 6' | 8'	9' | 6' | 11'3" | 11'3" | 6' | 9'
Option 2	8' | 10' | 10' | 10' | 6' | 9'	8' | 10' | 10' | 10' | 6' | 9'	9' | 6' | 10'3" | 11' | 11' | 10'3" | 5'	9' | 6' | 11'3" | 10'3" | 10' | 6'

BIKE PLAN UPDATE

2nd Street
Market to King

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SFDPT SAN FRANCISCO DEPARTMENT OF PARKING & TRAFFIC

2nd Street Cross-Section Concept Sheet 1 of 1
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

SUMMARY SHEET OUTLINE

5TH STREET, MARKET TO TOWNSEND

Project Description

Fifth Street is a high volume downtown street in the SOMA neighborhood of San Francisco. It is designated as a Major Arterial in the San Francisco Bicycle Plan. Bicycle improvements to Fifth Street would provide an important connection between Market Street and the Caltrain Depot in the South Beach section, and would connect to the popular Howard and Folsom Street bike lanes. The street also provides important connections for motor vehicles, trucks, and transit.

Fifth Street has two lanes of travel in each direction with parking on both sides of the street. The street serves residential and retail uses. The street is 52'6" wide between Market and Mission Street and widens to 62'6" south of Mission Street. To allow for the installation of bike lanes, one travel lane would need to be removed in each direction on the 52'6" wide section, and one of the four travel lanes would need to be removed from the section south of Mission.

History/Background

Fifth Street was identified as a part of the comprehensive bicycle route network developed for the San Francisco Bicycle Plan, which was approved by the SF Board of Supervisors in 1997. In 1998, the DPT studied the potential installation of bike lanes on Fifth Street and looked at the impacts of bike lane removal to provide bike lanes. The lane removals were reviewed, but not approved by the Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT).

DPT's West Approach Retrofit Project in SOMA will affect Fifth Street. This project will close streets under the freeway and alter the lane configurations. The project will be completed in 2008.

The San Francisco County Transportation Authority Market Street study, with final recommendations to be developed December 2003, addresses intersecting streets including Fifth, and may provide recommendations that could influence intersection LOS conditions on Fifth Street.

Design Segments

- Market to Mission: Currently, there are two travel lanes in each direction and parallel parking on both sides of the street. Bike lanes could be provided on this segment if one travel lane is removed in each direction. In the event that permanent lane removal cannot be accomplished in both directions due to capacity issues, additional bicycle facility options to be investigated should include a combined peak hour tow-away parking lane and bike lane subject. This treatment is included in the Bike Plan Update Supplemental Design Guideline as 11A.

- Mission to Harrison: This segment has two travel lanes in each direction and parallel on-street parking on both sides of the street. The street is 62'6" wide in this section, so only

one lane of travel would need to be removed. Based on their studies, DPT recommends that if a lane is removed, that it be a southbound lane.

- Harrison to Brannan: This segment currently has two travel lanes in each direction and parallel on-street parking on both sides of the street. The street is 62'6" wide in this section, so only one lane of travel would need to be removed. Based on their studies, DPT recommends that if a lane is removed, that it be a southbound lane.

- Brannan to Townsend: This segment has two travel lanes in each direction and on-street parking on both sides of the street. The street is 62'6" wide in this section. DPT recommends that one lane be removed, and one lane be converted to an alternating left turn lane to create space for bicycle lanes in each direction.

Capacity

- According to DPT's Level of Service Analysis conducted in 1998 of what is described here as Option 1, the reduction of a travel lane on Fifth Street would result in a Level of Service "F" at Mission, Howard, and Harrison Streets, indicating that that the demands of the intersection exceed capacity. The impact of travel lane reductions to traffic operations on Fifth Street should be studied further, as a lane removal is likely to create severe congestion along sections of the street. Coordination with the West Approach Retrofit Project and associated detours will be necessary.

Transit

- MUNI operates the numerous bus lines on Fifth Street (see table below). Due to lane removal, bus service will likely be affected because of the reduction in capacity.

Bus Route	From	To	Service Frequency At PM Peak
27	Market	Bryant	12 minutes
47	Harrison	Townsend	7 minutes
26	Market	Jessie	15 minutes
16AX/16BX	Market	Townsend	15 minutes

- MUNI supports maintaining two lanes in each direction. If an alternative requiring a three lane configuration is required to implement the recommended bicycle facility, then turn pockets or other design treatment should be used to minimize impact of turning vehicles to transit service.

Parking

- Because there is high demand for parking on Fifth Street, on-street parking will not be removed or affected. Given the lack of buildings fronting the street between Harrison and Brannan Streets under the freeway, there may be an opportunity for parking removals, though the space is still heavily used.

Pedestrian Concerns

- The proposed bicycle improvements benefit pedestrians by decreasing the effective crossing distance across Fifth Street. While the curb-to-curb distance will remain

constant, the number of travel lanes will be reduced, so crossing at signalized or unprotected crosswalks will be simplified.

Land Use

- The land use along Fifth Street is comprised of a mix of residential, office, and retail. No land use conflicts would be associated with the proposed changes.

Other Departments or Agencies

- MUNI should be involved with the development of plans on Fifth Street that may affect their service.

Next Steps

- Capacity analyses associated with the travel lane reductions should be conducted by DPT.
- Coordination with the West Approach Retrofit Project should take place so that necessary detours are accounted for.

1. 5th between Market and Mission, looking southeast. This section "Bicycles Allowed Use of Full Lane" signs are posted along this section of 5th..

2. 5th Street approaching Howard, looking southeast. A parking facility is located on the northeast side of the street.

3. 5th and Howard, looking southeast. The demand for on-street parking is relatively lower in this section.

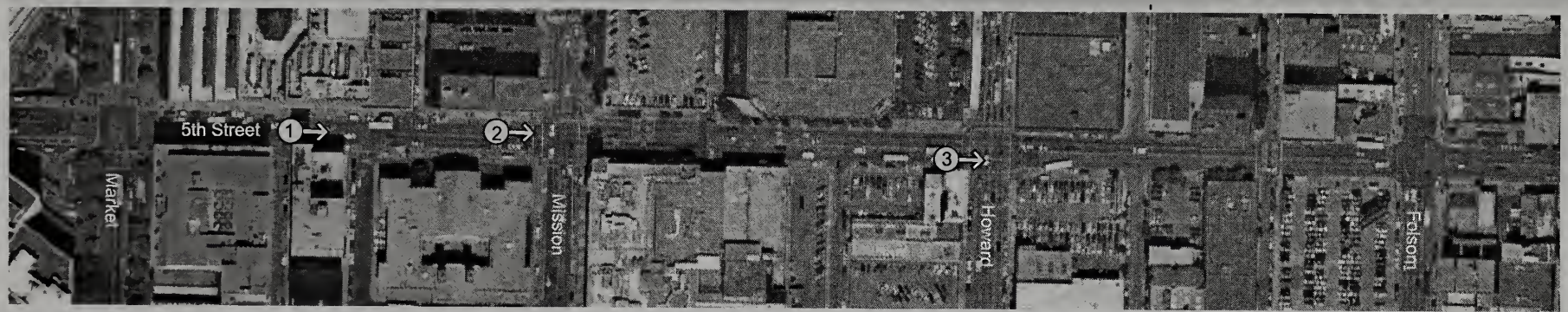
4. 5th and Harrison, looking southeast. This section has low demand for on-street parking.

5. 5th and Bryant, looking southeast. The bicyclist is attempting to make a left-turn onto Bryant.

6. 5th and Bryant, looking northwest. The double-right turn lanes present a hazard for bicyclists that need to continue straight on 5th.

7. 5th approaching Brannan, looking southeast. There is a mix of parallel and diagonal parking on the southwest side of the street.

8. 5th and Townsend, looking northwest. Townsend provides an important north-south connection between the Embarcadero and Eighth.



SF BIKE PLAN UPDATE

5th Street

Market St. to Townsend

This draft diagram is designed for public input and discussion purposes.
This is a representative diagram and is not based on actual survey data.
All information presented in this diagram is subject to modification.

DRAFT 8/08/03

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SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

5th Street Existing Conditions Sheet 1of 1 (Market to Townsend)
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

Street Cross-Section Typicals (looking southeast towards Townsend)

Ⓐ Market to Mission

Existing: 17'3" | 9' | 9' | 17'3"

Option 1: 9' | 6' | 11'3" | 11'3" | 6' | 9'

Option 2: 8'6" | 10' | 10' | 10' | 5' | 9'

Ⓑ Mission to Harrison

Existing: 20'7" | 10'8" | 10'8" | 20'7"

Option 1: 9' | 5' | 11'6" | 11'6" | 11'6" | 5' | 9'

Option 2: 8'6" | 10' | 10' | 10' | 10' | 5' | 9'

Ⓒ Harrison to Brannan

Existing: 11' | 10'8" | 10'8" | 21'7"

Option 1: 6' | 11'8" | 10'8" | 10'7" | 6' | 9'

Option 2: 6' | 10' | 10'8" | 10'8" | 10'8" | 6'

Ⓓ Brannan to Townsend

Existing: 31'3" | 31'3"

Option 1: 9' | 5' | 11'6" | 11'6" | 11'6" | 5' | 9'

SF BIKE PLAN UPDATE

5th Street
Market to Townsend

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All information presented in this diagram is subject to modification.

DRAFT 11/26/03

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SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

5th Street Cross-Section Concept Sheet 1 of 1
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

14TH STREET

SUMMARY SHEET OUTLINE

General Project Description

The existing 14th Street configuration from Market to Dolores Streets is two-way with a 17'-6" combined through and parking lane westbound to Market, and a 10'-0" through lane and 17'-6" combined through and parking lane eastbound. East of Dolores Street, 14th Street transitions to a one-way, two-lane street with bike lane. The project would (Option A) preserve two-way operation and add an eastbound bicycle lane with the removal of one eastbound lane, or (Option B) convert 14th Street from Market to Dolores Streets to one-way and extend the bike lane through this block. Market Street has an existing inbound bike lane at 14th Street. An existing triangular-shaped diverter island/pedestrian refuge would be removed and a new curb extension installed, reducing the overall pedestrian crossing distance. The existing signal pole could remain in place with the new curb extension built around it.

History/Background

In 1970, 14th Street was converted from a two-way street to a one-way eastbound street from Market to Guerrero Streets. The block of 14th Street between Market and Dolores Streets was converted back to a two-way street in 1984. Most recently there have been numerous requests to relieve the back-up that occurs on the eastbound 14th Street approach to Market Street. In 2000, an eastbound bike lane was striped on 14th Street starting at Dolores Street.

Design Segments

Option A Design:

This proposed design includes the following features:

- Re-striping of 14th Street to retain the westbound 17'-6" combined parking and through lane, a 12'-6" eastbound through lane, a new 5'-0" bicycle lane, and a 9'-0" parking lane by removing an eastbound lane.
- Preserve existing triangle island right-turn diverter/pedestrian refuge.

Option B Design:

This proposed design includes the following features:

- Re-striping of 14th Street from two-way to one-way eastbound travel, removing the westbound lane and creating a 19'-0" combined parking and through lane, an 11'-0" through lane, a 5'-0" bicycle lane, and a 9'-0" parking lane.
- Reconfiguration of the Market Street and 14th Street intersection including removal of the existing triangle island right-turn diverter/pedestrian refuge.
- Construction of a curb extension at the east corner of 14th and Market Streets.

Capacity

Option A Design:

- Elimination of the eastbound lane will have local traffic impacts. Currently, eastbound 14th Street queues usually do not clear the Market Street intersection during AM peak

hour traffic signal cycles, indicating existing Level of Service at or near F for the approach. Queues were observed to regularly reach back to Sanchez Street. Elimination of an eastbound lane will further exacerbate these conditions and lead to spillover traffic to neighboring streets. The 14th Street traffic volumes at Market Street do not warrant converting the second eastbound lane to a Left Turn Only lane onto Market Street.

Option B Design:

- Elimination of two-way travel on this one-block segment may impact ability of local residents and merchants to complete local vehicle trips. However, surrounding streets offer reasonable alternate routes for motorists currently using 14th Street westbound between Dolores and Market Streets.

Transit

Option A Design:

- Service to the 27 Corbett would be impacted by a traffic backup created by loss of eastbound lanes. Transit on Church and Market Streets would be impacted by any reallocation of green time from those streets to 14th Street to compensate for the loss of the eastbound lane.

Option B Design:

- No transit impacts.

Parking

Option A Design:

- No parking impacts.

Option B Design:

- No parking would be lost. Direction of parking on north-side of street would be reversed. Meter poles would have to be relocated.
- Optional parking configuration includes diagonal parking on north side of 14th Street, with curbside bicycle lane on south side of 14th Street.

Trucks

Option A Design:

- Truck traffic eastbound on 14th Street west of Market Street would be impacted by loss of the eastbound lane.

Option B Design:

- Local delivery trucks may be impacted, although there is light, if any, delivery traffic on this block. Alternate routes in the immediate area should provide acceptable access. This should be discussed and confirmed with businesses in the area.

Pedestrian Concerns

Option A Design:

- This design does not change pedestrian accommodation.

Option B Design:

- This design decreases the overall crossing distance for pedestrians along Market Street at the project area by filling in the current right turn pocket with a sidewalk bulb.

Land Use

- Surrounding land use is high-density residential and commercial retail. Potential conflicts with local merchants need to be addressed as part of all circulation and capacity analyses.

Other Departments or Agencies

- Muni should be consulted on this project regarding any impacts to Market Street and Church Street transit lines. None are foreseen with Option B.
- No Muni lines run directly on 14th Street between Market and Dolores Streets, but do run on 14th Street just west of the project area. Any changes to signal timing at this intersection will likely affect Muni operations on one or both of these streets.

Preliminary Cost Estimate

- Option A: $10,000.
- Option B: $81,000.

Next Steps

- Analysis of potential impacts to local merchants resulting from changes to local circulation patterns resulting from the elimination of westbound vehicle travel on 14th Street (Option B).

1. View of 14th from the west side of Market. The Market/14th intersection essentially has five epproeches, including Church. Two traffic lanes enter 14th.

2. View of Market epproeching 14th. Note the Class II bicycle lane on Market.

3. Looking easterly along 14th east of Market. Between Market end Dolores, 14th's cross-section consists of parallel perking on both sides, one westbound traffic lane and two eastbound traffic lanes.

4. Looking easterly along 14th towards Dolores. Between Market and Dolores, 14th is 44 feet wide between curbs.

5. East of Dolores, 14th is e one-way eastbound roadway with a Class II bicycle lane.

6. View along 14th looking westerly across the Dolores' intersection.

7. Landers is a one-way (northbound) locel street serving residences south of 14th. It has parking on both sides and speed humps. Its intersection with 14th is located just easterly of Market.

8. Looking easterly from Market along the north side of 14th. The north side of 14th, between Market and Dolores, has designated parallel parking speces.

14th Street
Existing Conditions

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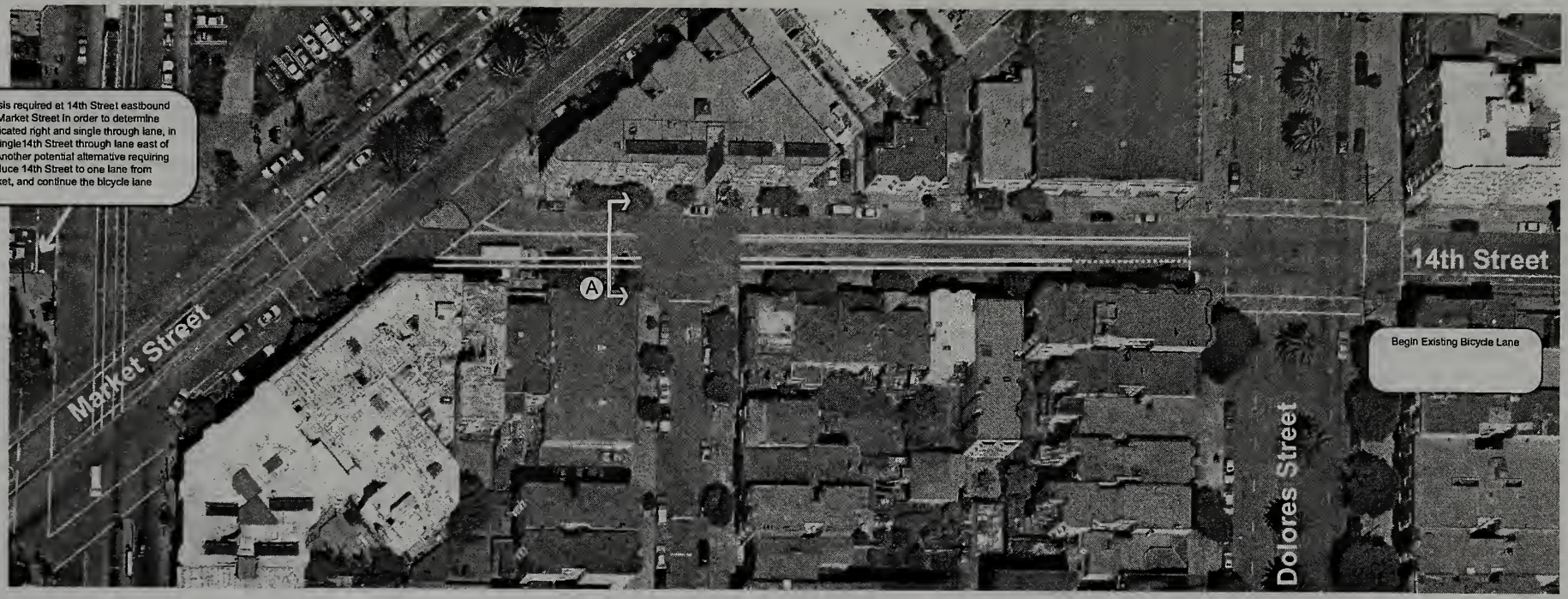
BIKE PLAN UPDATE
SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

14TH STREET EXISTING CONDITIONS SHEET 1 OF 1
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

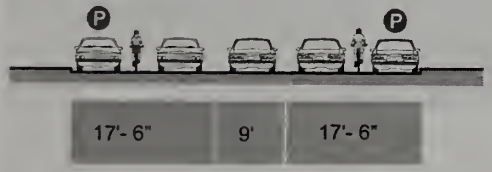
14th Street

Design Concept (Option A)

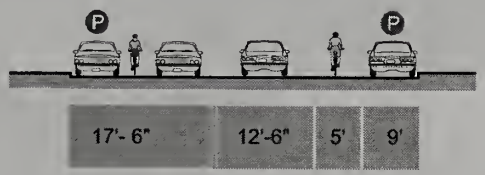

Additional analysis required at 14th Street eastbound on west side of Market Street in order to determine feasibility of dedicated right and single through lane, in order to match single 14th Street through lane east of Market Street. Another potential alternative requiring analysis is to reduce 14th Street to one lane from Sanchez to Market, and continue the bicycle lane
Market Street
A
14th Street
Begin Existing Bicycle Lane
Dolores Street

Sections

Ⓐ Existing Lane Configuration



Ⓐ Proposed Lane Configuration



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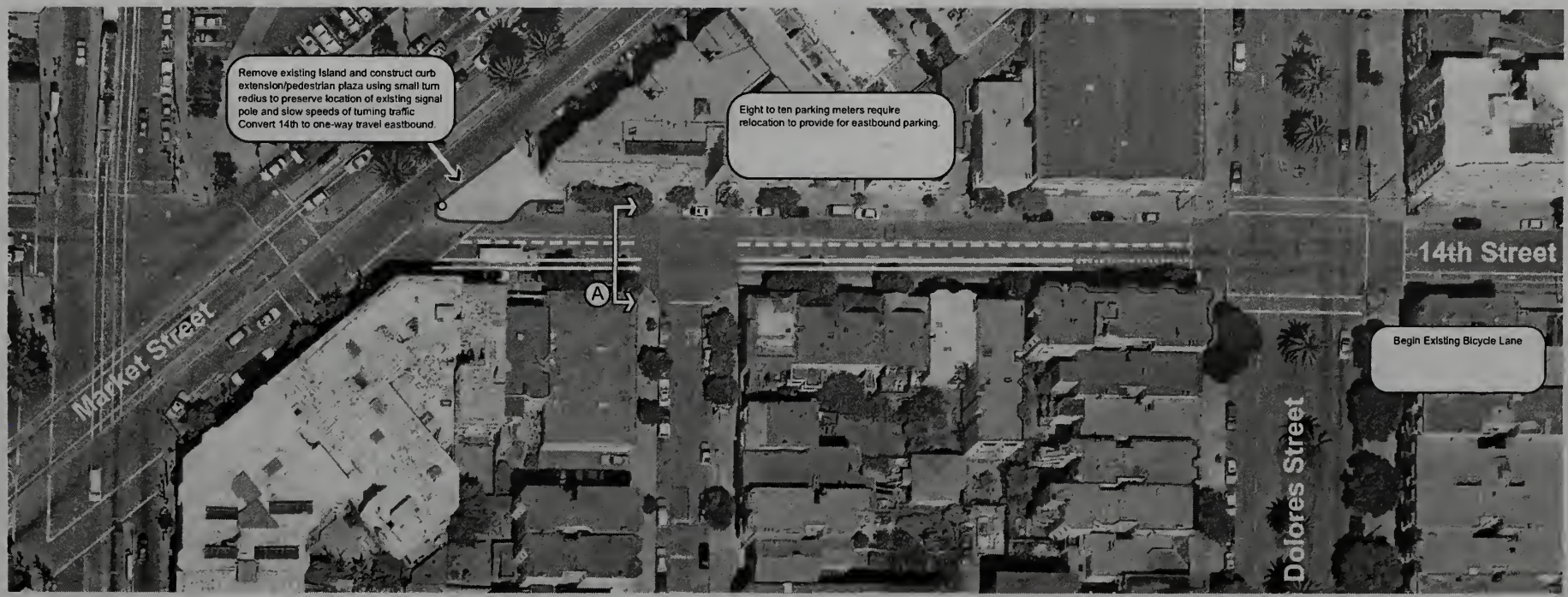
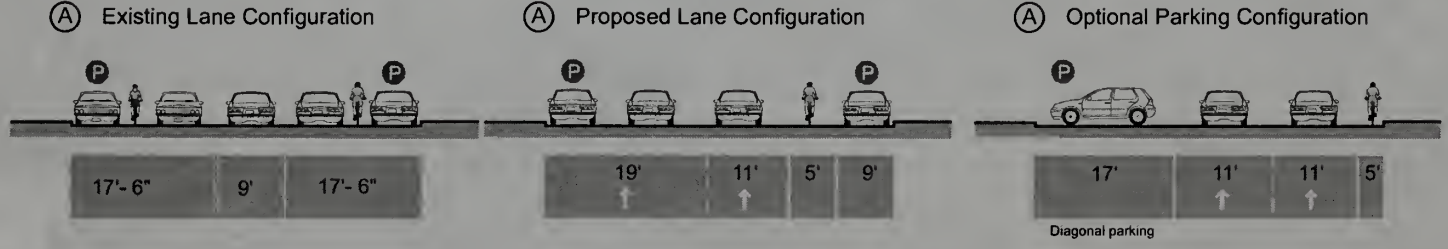
14TH STREET DESIGN CONCEPT SHEET 1 OF 1 (CONCEPT A)
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

14th Street

Design Concept (Option B)


Remove existing Island and construct curb extension/pedestrian plaza using small turn radius to preserve location of existing signal pole and slow speeds of turning traffic Convert 14th to one-way travel eastbound.
Eight to ten parking meters require relocation to provide for eastbound parking.
Begin Existing Bicycle Lane
Market Street
14th Street
Dolores Street
A

Sections



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14TH STREET DESIGN CONCEPT SHEET 1 OF 1 (CONCEPT B)
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SUMMARY SHEET OUTLINE

16TH /17TH STREET CORRIDOR, MARKET STREET TO KANSAS STREET

Project Description
Sixteenth and seventeenth Streets are high-volume roadways in the central-eastern part of San Francisco. Bicycle improvements to the 16th/17th Street corridor would provide important east-west bicycle access south of Market Street, primarily in the Mission District. The east-west routes would provide connections to existing north-south bike lanes on Market, Valencia, Harrison, and Kansas Streets. Since 16th Street is a significant commercial corridor, it has a higher volume of traffic and higher parking turnover than 17th Street. There are numerous variations in width and lane configuration on both 16th and 17th Streets. Many of these variations are listed below in the description of design options for the various segments.

Bike lanes along 16th Street (Church Street to Harrison Street) as well as bicycle improvement options for 15th Street (as a couplet with the existing 14th Street bike lanes) were explored in the initial corridor conditions review. Upon review of the current data by the Bicycle Plan Update Technical Advisory Committee, it was determined that a proposal showing bike lanes along 16th Street (Church Street to Harrison Street) is premature until additional analysis can be undertaken. It is recommended that a full corridor study be explored to enhance the movement of several modes in this area, including Muni and bicycles.

To develop an improved bicycle facility that can be implemented in the short-term, it is most feasible to utilize segments of both 16th Street and 17th Street Currently, the only segment of 16th Street where modifications to the existing condition appear acceptable is in the vicinity of Franklin Square, from Kansas Street in the east to Bryant Street to the west. This segment would require a north-south connection to 17th Street on Bryant Street along the western boundary of Franklin Square . Improvements on 17th Street from Bryant Street to Market Street are then required in order to improve bicycle circulation through this corridor. These segments are addressed below.

History/Background
As recommended in the 1997 Bicycle Plan, 17th Street (between Market and Kansas Streets) has been made part of Bicycle Route 40 as a Class III facility. Other than bicycle route signs, no other bicycle-related improvements have been made to this section of 17th Street. During the development of the 1997 Bicycle Plan, there was much public comment on whether 16th or 17th Streets should be the signed bicycle route. Seventeenth Street was chosen since there is no Muni service on 17th Street except for one block between Noe and Castro Streets.

Design Segments

- *16th Street, Market Street to South Van Ness Avenue*: Currently, there are three travel lanes: one eastbound, two westbound, and parallel parking on both sides. Due to existing double parking, frequent loading and unloading, bus service, and truck volumes, any reduction in the width or number of traffic lanes to stripe a bike lane would generate significant negative traffic impacts. Additional study is required to identify feasible bicycle improvement options for this segment of 16th Street that will limit impacts to transit service, and local parking supply, and that will improve pedestrian safety. The

segment from Market to Church Streets, due to lack of transit conflict and lower traffic volumes, does not have the same level of mode conflict described above and could be considered as a separate segment.

- *16th Street, South Van Ness Avenue to Bryant Street*: Currently, there are four narrow 9' travel lanes, 7' wide parking on both sides, and numerous driveways. Elimination of a single travel lane would not provide enough width to provide two standard bike lanes. Given the dense traffic and high parking turnover on 16th Street, shared use lanes with sharrows are not recommended. Additional study is required to identify feasible bicycle improvements for this segment of 16th Street that will limit impacts to transit service, local parking supply, and pedestrian safety.
- *16th Street, Bryant Street to Potrero Avenue*: Currently, there are four travel lanes and parking on both sides. Bike lanes could be provided by eliminating a travel lane and providing a two-way center turn lane. These alternatives are not recommended due to negative transit impacts. Elimination of parking on the south side of the street and establishment of four 10-foot wide traffic lanes (two in each direction) would provide adequate width for striping bike lanes in both directions along this segment.
- *16th Street, Potrero to San Bruno Avenues*: Currently, there are three travel lanes and parallel parking on both sides with relatively low parking demand. On-street parking could be removed from one side of the street and traffic lanes narrowed to provide adequate width for bike lanes.
- *16th Street, San Bruno Avenue to Kansas Street*: Currently, there are four travel lanes. On-street parking could be removed from on side of the street and traffic lanes narrowed to provide adequate width for bike lanes.

- *17th Street, Market to Harrison Streets*: Currently, there are two and three travel lanes, with parallel parking on both sides. To provide bike lanes, the lane width and number of travel lanes (from three to two) would need to be reduced. There are several design options for this segment, presented in the concept sections. These options include: (Option 1) bike lanes in both directions, (Option 2) a bike lane westbound with sharrows in the eastbound traffic lane, and (Option 3) sharrows in both travel directions.
- *17th Street, Harrison Street to Potrero Avenue*: Currently, there are two travel lanes and signs that state, "Bicycles Allowed Use of Full Lane" and parallel parking on both sides. This is an appropriate location for sharrows.
- *17th Street, Potrero Avenue to Kansas Street*: Currently, there are two travel lanes and parallel parking on both sides. The less-used parking on the north side could be removed to provide an eastbound bike lane (Option 1). A second alternative (Option 2) is to use the sharrows in both directions.

Capacity

- The impact of travel lane reductions to traffic operations on 16th and 17th Streets and intersecting streets need to be studied further.
- Critical intersection analysis and traffic counts still need to be acquired and studied.

Transit

- Sixteenth Street is a major transit route. In the Mission District it carries the 22-Fillmore, one of Muni's highest ridership lines. The 22-Filmore currently experiences

delays due to traffic and congestion, as well as double-parking and traffic turning movements. The on-time performance for the 22-line is currently 70% of Muni's average.

- Reduction of travel lane width or elimination of travel lanes on 16th Street would cause further transit delays due to increased congestion. These impacts should be quantified through further analysis.
- The table below shows Muni's routes on 16th Street and their frequencies.

Bus Route	From	To	Service Frequency in p.m. Peak
22	Church Street	Kansas Street	6 minutes
33	Mission Street	Potrero Avenue	15 minutes
53	Valencia Street	Kansas Street	30 minutes
10	Rhode Island Street	Carolina Street	10 minutes
19	Rhode Island Street	De Haro Street	10 minutes

Parking

- A parking usage inventory was conducted by the SFBC to begin identifying the on-street parking demand and usage along this corridor **The following tables present the results of the SFBC parking inventory:**

Parking on 17th, Potrero to Kansas:

	North Side		South Side	
Segment	Count	Approx. Spaces	Count	Approx. Spaces
Potrero to Utah	5	5	6	8
Utah to San Bruno	5	5	9	10
San Bruno to Vermont	8	10	9	10
Vermont to Kansas	8	8	8	9

Parking on 16th, Market to South Van Ness:

	North Side		South Side	
Segment	Count	Approx. Spaces	Count	Approx. Spaces
Market to Sanchez	16	18	16	18
Sanchez to Church	21	21	21	21
Church to Dolores	9	9	17	18
Dolores to	17	21	16	16

Guerrero				
Guerrero to Valencia	5	14	10	14
Valencia to Mission	12	15	11	11
Mission to Van Ness	10	11	15	19

Parking on 16th, Bryant to Kansas:

Segment	North Side		South Side	
	Count	Approx. Spaces	Count	Approx. Spaces
Bryant to Potrero	16	18	19	20
Potrero to Utah	9	9	5	5
Utah to San Bruno	9	10	4	4
San Bruno to Vermont	6	6	6	6
Vermont to Kansas	6	9	6	6

Trucks

- Due to local businesses in the retail corridor between Guerrero Street and South Van Ness Avenue, 16th Street has significant truck traffic and significant double parking. Improvements for truck access and parking should be considered in any long-term corridor study that is undertaken.

Pedestrian Concerns

- The proposed bicycle improvements could benefit pedestrians by decreasing the effective crossing distance on 16th or 17th Streets. While the curb-to-curb distance will remain constant, the number of travel lanes will be reduced at some locations, so crossing at signalized or unprotected crosswalks will be simplified for pedestrians.

Land Use

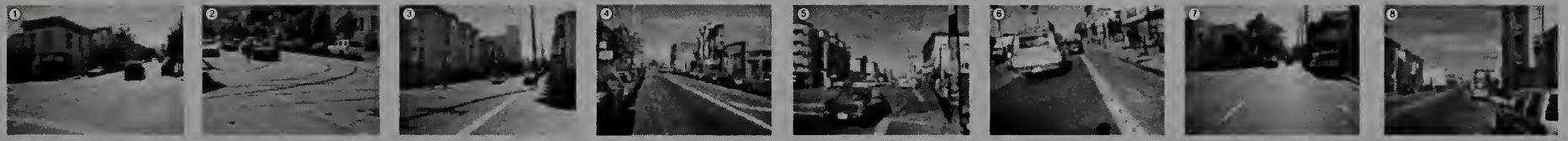
- The land use surrounding this corridor is a mix of retail, residential and some light industrial. On 16th Street, the surrounding properties are predominantly retail and on 17th Street, they are mostly light industrial. Residential use is also located along most blocks of both streets.

Other Departments or Agencies

- Coordination of future detailed study of the 16th Street corridor should be conducted as a joint project of the San Francisco County Transportation Authority, Department of Parking and Traffic and Muni.

Next Steps

- Capacity analyses associated with the travel lane reduction on 16th and/or 17th Streets should be conducted by DPT.
- A parking usage study could be conducted to determine the demand and "need" for on-street parking between Potrero Avenue and Kansas Street.
- Potential mitigation for parking loss between Potrero Avenue and Kansas Street should be identified.



1. 17th et Senchez, looking eestward. This section of 17th is 44' wide with 2 lenes of travel end parallel parking on both sides.

2. 17th at Church,looking eastward. The multiple trolley tracks present hazards for cyclists on this street.

3. 15th at Guerrero, looking westward. This section of 15th is two wey end primerily residential.

4. 15th between Guerrero and Velencia, looking eastward. This section of 15th is one-wey with parking on both sides. Primarily resdential area.

5. 16th at Valencia, looking eastward. This is a dense retail district with frequent double parking of delivery trucks. Note overhead bus lines.

6. 16th at Mission, looking eastward. The BART station is located at this intersection.

7. 15th west of S. Van Ness, looking west. This section of 15th is one way (westbound), with parking on both sides of the street.

8. 17th west of S. Van Ness, looking east. This section of 17th is 44' wide and runs through a mix of residential and industrial properties.

16TH/17TH STREET

MARKET ST. TO S. VAN NESS AVE.

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16TH/17TH STREET CORRIDOR
EXISTING CONDITIONS SHEET 1 OF 2 (MARKET TO S. VAN NESS ST.)
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SF BIKE PLAN UPDATE

1. 16th end S. Van Ness, looking east. While the roadway width is 50', there are four (9') travel lanes and parking (7') on both sides of the street.

2. 16th and Harrison, looking west.

3. 17th, approaching Harrison, looking eastward. This section is 44' wide, but transitions to 36' east of Harrison. This segment travels though e primarily industrial area.

4. 17th and Bryant, looking eastward. Recently installad signs indicate that bicyclists are allowed full use of the (narrow) lanas.

5. 16th and Portrero, looking west.

6. 16th underneath the I-280 ovarpass, looking wast.

7. 16th between Kansas and Vermont, looking west. The width of the roadway is 60' end thare are four lanes of travel.

8. 16th end Kansas, looking eastward. Existing bike lanes on 16th.

16TH/17TH STREET

S. VAN NESS AVE. TO KANSAS ST.

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16TH/17TH STREET CORRIDOR
EXISTING CONDITIONS SHEET 2 OF 2 (S. VAN NESS TO KANSAS ST.)
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

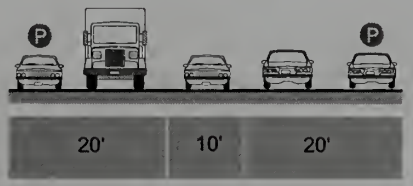
SF BIKE PLAN UPDATE

16TH STREET (LOOKING EAST)

Existing

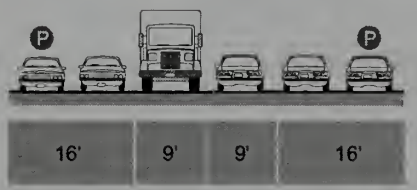
Option 1

(A) MARKET TO S. VAN NESS
PORTRERO TO SAN BRUNO



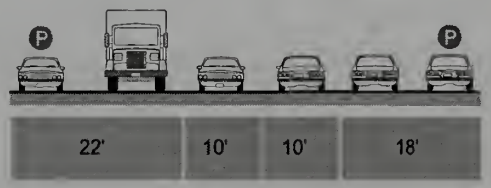
Additional study is required to identify feasible bicycle improvement options for this segment of 16th Street that will limit impacts to transit service, local parking supply, and pedestrian safety.

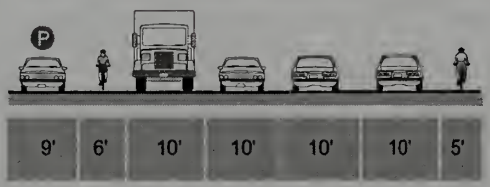
(B) S VAN NESS TO BRYANT



Additional study is required to identify feasible bicycle improvement options for this segment of 16th Street that will limit impacts to transit service, local parking supply, and pedestrian safety.

(C) BRYANT TO PORTRERO
SAN BRUNO TO KANSAS





16TH STREET
Market to Kansas

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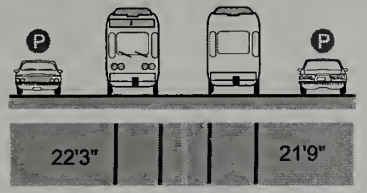
16TH/17TH STREET CROSS-SECTION CONCEPT SHEET: 16TH STREET
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SF BIKE PLAN UPDATE

17TH STREET (FACING EAST)

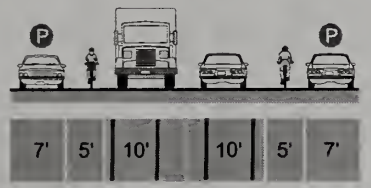
Ⓐ MARKET TO HARRISON

Existing

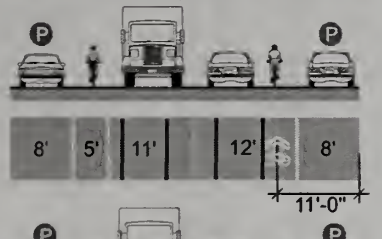


NOTE: Muni tracks are existing from Market Street to Church Street. All bike facility improvements for this section must address track location this segment.

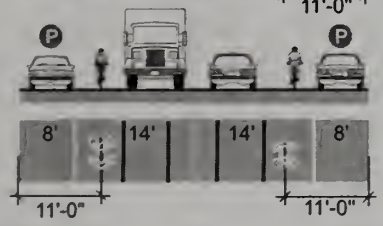
Option 1



Option 2

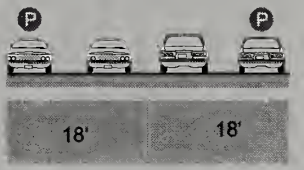


Option 3

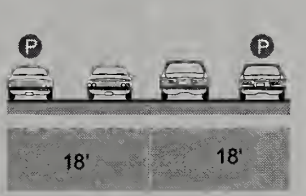


Ⓑ HARRISON TO POTRERO

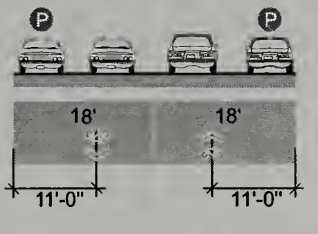
Existing



Option 1

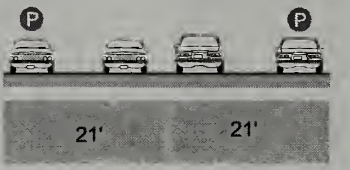


Option 2

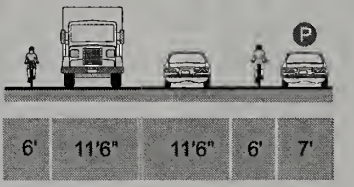


Ⓒ POTRERO TO KANSAS

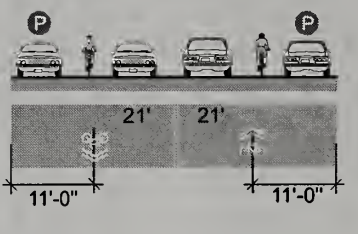
Existing



Option 1



Option 2



17TH STREET

THIS DRAFT DIAGRAM IS DESIGNED FOR PUBLIC INPUT AND DISCUSSION PURPOSES.
THIS IS A REPRESENTATIVE DIAGRAM AND IS NOT BASED ON ACTUAL SURVEY DATA.
ALL INFORMATION PRESENTED IN THIS DIAGRAM IS SUBJECT TO MODIFICATION.

DRAFT 3/19/04

16TH/17TH STREET CROSS-SECTION CONCEPT SHEET
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

BIKE PLAN UPDATE

SUMMARY SHEET OUTLINE

19 TH AVENUE, HOLLOWAY STREET TO BUCKINGHAM WAY AND 20TH STREET

Project Description

Nineteenth Avenue is a high-volume roadway in the southwestern portion of San Francisco. Nineteenth Avenue is State Highway 1 though this area of San Francisco, and is under Caltrans jurisdiction. Additionally, 19th Avenue has a Muni light rail line and bus lines along the project section. The 19th Avenue west side sidewalk provides an important connection for cyclists and pedestrians between San Francisco State University (SFSU) and the Stonestown Galleria to the north.

History/Background

The SFSU connection is proposed in the 1997 Bicycle Plan and is described under Bicycle Route 775. The recommendation included in the original plan is for a two-way sidewalk bicycle path separated from the roadway by a 54" high fence. The original proposed configuration depicts the two-way bicycle path located between the existing sidewalk and the curb lane. Additional recommendations include motorist-warning signage at Buckingham Way. Any modification to the roadway, and segments the existing sidewalk within the Caltrans right-of-way would require Caltrans approval.

Design Segments

- Nineteenth Avenue, SFSU to Buckingham Way: The existing bicycle/pedestrian connection is a 10' sidewalk on the west side of the street. Option 1 for this section widens the existing sidewalk by five feet, while Option 2 provides a 2'-separated buffer between an 8' sidewalk and a 10' shared use path. A third option requiring Caltrans approval, is to extend the curb east into the roadway from Buckingham Way to approximately 200' south, gaining an additional 10' of sidewalk width for this segment.
- Buckingham Way, 19th to 20th Avenues: This short segment provides a connection between 19th and 20th Avenues. Currently, there are 5' sidewalks on each side of the street. Option 1 provides bike lanes on both sides of the street by removing the parking on the south side of the street. Option 2 maintains on-street parking, and narrows the parking lanes and travel lanes to provide a bike lane in the eastbound direction.

Capacity

- Capacity will not be affected since no travel lanes will need to be removed.

Parking

- On 19th Avenue, parallel parking exists along the street, and it will not need to be removed.
- On Buckingham Way, between 19th and 20th Avenues, Option 1 calls for the removal of the seven parking spaces on the south side of the street.

Transit

- Muni train and bus service on 19th Avenue should not be affected by any of the proposed changes.

Pedestrian Concerns

- The proposed bicycle improvements along 19th Avenue will benefit pedestrians by providing more space for both bicyclists and pedestrians. Currently, both bicyclists and pedestrians share the 10' sidewalk along 19th Avenue.
- ADA issues need to be addressed with each of the bicycle improvements options, particularly Option 2 where a grade difference is proposed between the bicycle and pedestrian pathways.

Land Use

- The majority of this section borders the SFSU property. The rest of the section borders residential properties.

Other Departments or Agencies

- The proposed changes on 19th Avenue and Buckingham Way will require property easements and/or acquisition from adjacent property owners.
- Caltrans coordination is required
- Department of Public Works coordination is required on ADA issues

Next Steps

- Identify property ownership boundaries adjacent to the west-side sidewalk on 19th Avenue.
- Identify potential mitigation for parking loss along Buckingham Way.
- Determine preliminary cost estimates for two options along 19th Avenue.
- Coordination with SFSU, DPW, Caltrans, and Pacific Gas & Electric is required to obtain easements and approvals required for sidewalk widening.
- Develop PS&E.

1. The sidewalk on the west side of 19th Avenue between San Francisco State University end Stonestown Gellena is used by pedestrians end cyclists.

2. Along the 19th Avenue sidewalk, looking north. To the west of the sidewalk, the property slopes downward towards SFSU and a residential development.

3. If the sidewalk is widened, trees and vegetation will need to be removed or eccomodated in the design of the walkway.

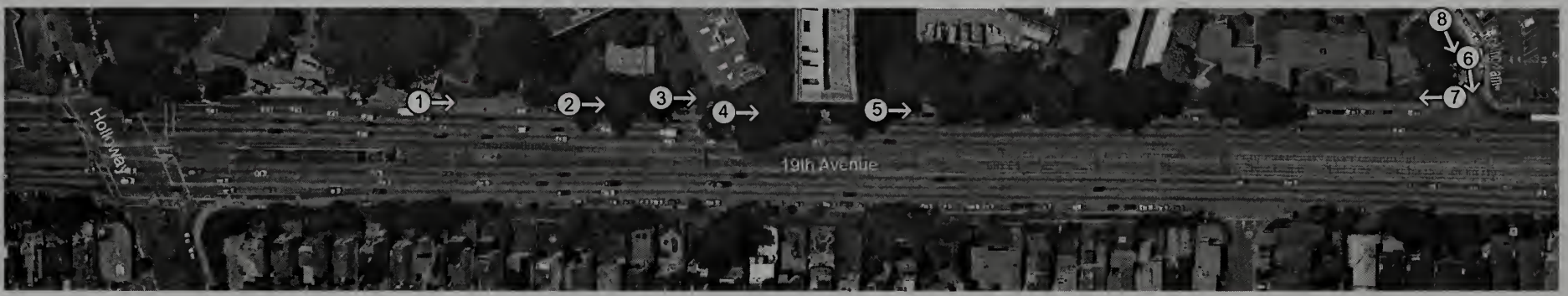
4. The current sidewalk between SFSU and Buckingham is 10' wide. 19th Avenue is difficult to cross due to the number of travel lanes, travel speeds, and the presence of the Muni train line.

5. If the sidewelk is widened to eccomodate bicyclists, utility pole guy wires will need to be moved.

6. Buckingham Way, looking east towards 19th Avenue. The roadway is 40' wide and the sidewalks are 5' wide. There is on-street parking on both sides of the street.

7. 19th Avenue looking south at Buckingham Way. The sidewalk on 19th is wider in this short section in front of the Stonestown Apartments

8. Buckingham Wey looking east towards 19th Avenue. Any widening of the sidewalk would require property acquisition or an easement.



SF BIKE PLAN UPDATE

19th Avenue

Buckingham to Holloway

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This is a representative diagram and is not based on actual survey data.
All information presented in this diagram is subject to modification.

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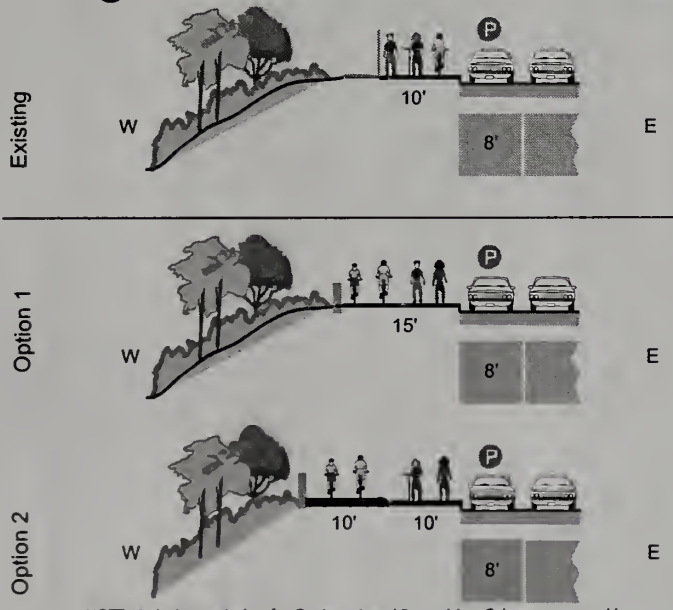
SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

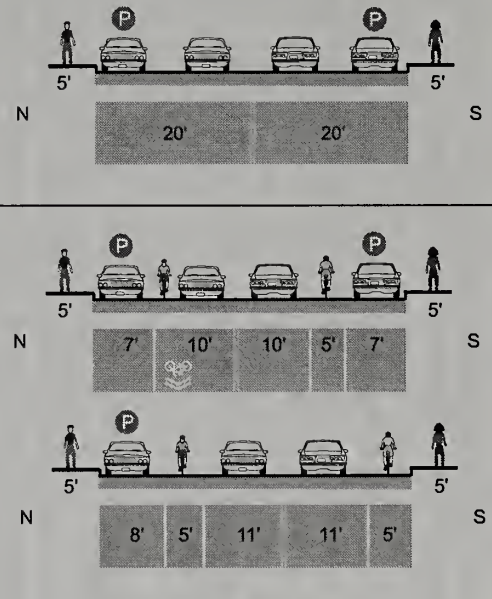
19th Avenue (Buckingham to Holloway) Existing Conditions Sheet 1of 1
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

Street Cross-Sections

Ⓐ 19th Avenue Walkway, SFSU to Buckingham Way



Ⓑ Buckingham Way, 19th to 20th, looking east



NOTE: A design variation for Options 1 and 2 requiring Caltrans approval is to extend the curb east from Buckingham Way south to SFSU to gain an additional 10' of sidewalk width for the northern-most segment of 19th Avenue. This option would eliminate private property impacts but would require removal of the existing travel/acceleration lane along this segment.

19th Avenue

Buckingham to Holloway

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All information presented in this diagram is subject to modification.

DRAFT 3/17/04

19th Avenue (Holloway to Buckingham) Cross-Section Concept Sheet
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

SUMMARY SHEET OUTLINE

ALEMANY BOULEVARD, SAN JOSE TO INDUSTRIAL

Project Description

Alemany Boulevard is a moderately-high volume arterial in southern section of San Francisco. Bicycle improvements to Alemany Boulevard would provide an important connection between Outer Mission and Excelsior neighborhoods. This bicycle lane project would connect the Outer Excelsior and Outer Mission with central San Francisco.

The majority of the length of Alemany Boulevard provides three lanes of travel in each direction with parking on both sides of the street. The southern segment between San Jose and Rousseau passes through a primarily residential neighborhood. The northern portion serves solely as a transportation corridor adjacent to I-280, and is a separated couplet. To allow for the installation of bike lanes, one travel lane would need to be removed in each direction or a parking lane converted to a bike lane.

History/Background

Following construction of I-280, Alemany Boulevard carries less traffic and is under capacity. The roadway between San Jose Avenue and Rousseau Street could be designated as Route 45 instead of the current alignment along Cayuga Avenue, which is less than ideal for cyclists wishing to avoid many 2-way STOPs.

Design Segments

- San Jose to Rousseau: Currently, there are three travel lanes in each direction with a central, 4'-wide median. There is on-street parking on both sides of the street. To provide for bike lanes, a travel lane would need to be removed in each direction in this section. The speed limit here is 35 mph. In addition, parking may need to be removed at critical intersections to allow for more capacity. An alternative to parking removal at key intersections is to remove the median at intersection in order to provide necessary width for vehicle turn lanes and bicycle lanes.
- Rousseau to South of Justin Drive: This segment is similar to the previous segment, except that there is no on-street parking for half this stretch and the travel lanes are one to two feet wider.
- South of Justin Drive to Couplet "split": This section has three travel lanes in each direction. While there is room for parking on both sides of the street, it is prohibited in the north-bound direction, and seldom used in the southbound direction. To simplify the installation of bike lanes, the parking lane could simply be converted to a bike lane and the number of lanes retained.
- Couplet Section: This section has two separated one-way roadways. Each roadway has three travel lanes and on-street parking in the southbound direction only. The parking is used heavily in the residential section of the street between Peralta and Ellsworth. The speed limit here is 40mph south-west bound and 45 mph north-east bound. The feasibility of a parallel two-way bike path adjacent to and separated from the north-east

bound couplet segment could also be analyzed in greater detail, dependent on available right-of-way and potential for safe connections back to the roadway.

- Putnam St. to US-101/I-280: This section has 3 travel lanes in each direction with no on-street parking. A consideration is to drop the north-east bound bike lane at Putnam Street and restripe north-east bound Alemany Boulevard with wide curb lanes and sharrows. Treatment for this transitional segment should be finalized dependent on final treatment recommendation for Alemany Circle.
- Alemany Circle (US-101/ I-280): This section of Alemany would be extremely challenging for bicyclists due to the high number of turning movements related to the on- and off-ramps and high speeds. Colored bike lane treatments across the highway on- and off-ramps may be used to help highlight the presence of bicycles across these high-conflict areas. Wider curb lanes and sharrows should also be considered to improve motorist awareness of bicyclists along this segment of the proposed project. Additional traffic analysis is required to determine the feasibility of reducing the vehicle lanes to one, and providing a bicycle lane and buffer.

Capacity

- The impact of travel lane reductions to traffic operations on Alemany Blvd will be minimal along most of its length, but there are key intersections, such as at Geneva and at Ocean, where more in-depth analysis is required.
- Analysis of Alemany Circle turning movements to determine feasibility of striped bike lane and/or color treatments at potential conflict points.

Transit

- MUNI operates buses on Alemany Blvd. The #67 bus travels on Alemany between Ellsworth and Putnam. The #23 bus also services Alemany Blvd. Due to the lane removal, bus service may be affected because of the reduction in capacity. However, the retention of at least two travel lanes in each direction will allow buses to pass any stopped vehicles. The 44 and 52 run on Alemany Blvd for approximately a quarter mile between Silver Ave and Rousseau. The 9X and 9AX are on Alemany Blvd as part of a one-block turnaround near Geneva Ave.

Parking

- In order to install bike lanes, on-street parking spaces may need to be removed at critical signalized intersections between San Jose and Rosseuau to allow for a vehicular turn lanes. Also, the on-street parking on the southbound side of the street between Ellsworth and Justin may be converted into a bike lane, as it is not highly used.

Pedestrian Concerns

- The proposed bicycle improvements benefit pedestrians by decreasing the effective crossing distance across Alemany Blvd. While the curb-to-curb distance will remain constant, the number of travel lanes will be reduced and crossing at signalized or unprotected crosswalks will be simplified.
- On the other hand, the proposed improvements that call for the removal of parking between US101 and I-280 may decrease the comfort of pedestrians along these sections of the sidewalk, due to the elimination of the buffer of parked cars.

Land Use

- The land use along the southern section of Alemany is primarily residential, with some retail uses. No land use conflicts would be associated with the proposed changes.
- Parking removal is a concern for residents along some segments.

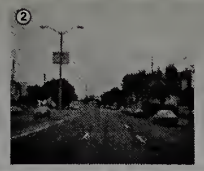
Other Departments or Agencies

- MUNI should be involved with the development of plans on Alemany Blvd. that may affect their service.

Next Steps

- Capacity analyses at key intersections associated with the travel lane reductions should be conducted by DPT.
- More precise identification and potential mitigation for parking loss should be identified.

1. Alemeny at San Jose, looking northeast. A bikeway on Alemany would connect with the bikeways on San Jose to the south and Sagamore to the west.

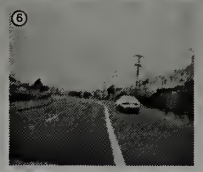


2. Alemany at Sickles, looking northeast. The cross sections reamins fairly consistent between San Jose and Rousseaus

3. Alemany at Mt. Vernon, looking northeast . There is a dedicated left-turn lane in the northbound direction.

4. Alemany at Onondaga, looking northeast. Left-turns are prohibited at this signalized intersection.

5. Alemany, between Rousseau and Justin, looking northeast. The cross-section changes here and posted speeds increase to 40 mph.



6. Alemany, approaching Justin, looking southwest. Here, bicyclists could use the exit ramp to the right in order to safely cross I-280.

7. Alemany north of Ellsworth, looking southwest. This section is mostly residential with on-street parking. Near Ellsworth, there is lower demand for parking.

8. Alemany approaching US101, looking northeast. This intersection will ba challenging for bicyclists due to the number of on- and off- ramps.

BIKE PLAN UPDATE

Alemany

San Jose to Industrial

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DRAFT 12/05/03

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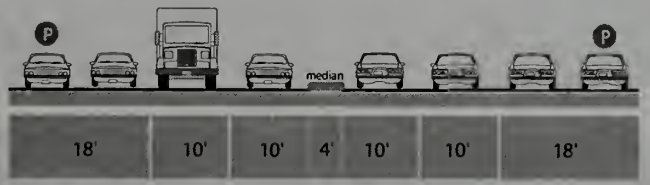
SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

Alemany Existing Conditions Sheet 1of 1 (San Jose to Industrial)
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

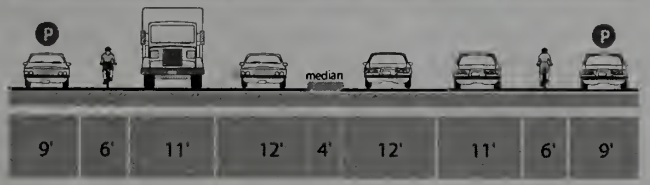
Street Cross-Section Typicals (looking northeast to Industrial)

Ⓐ San Jose to Rousseau

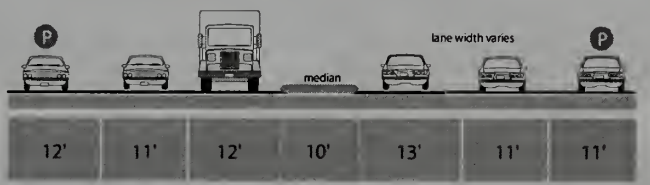
Existing

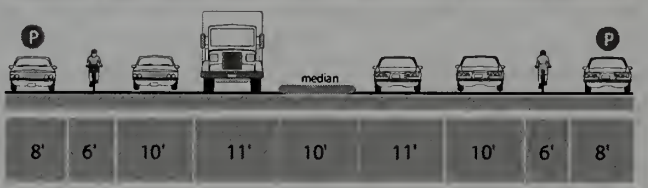


Option 1



Ⓑ Rousseau to Couplet "Split"





BIKE PLAN UPDATE

Alemany

San Jose to Couplet Section

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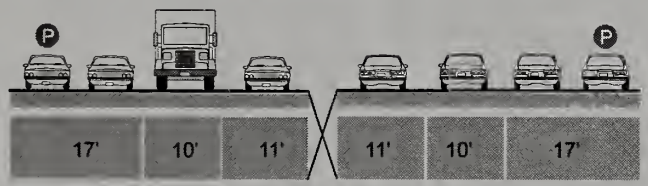
Alemany St. Cross-Section Concept Sheet 1 of 2
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

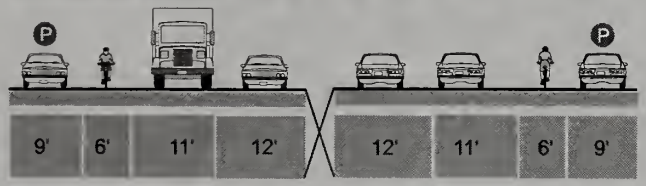
Street Cross-Section Typicals (looking northeast to Industrial)

Ⓒ Couplet Section (n. of Justin Dr. to Putnam)

Existing



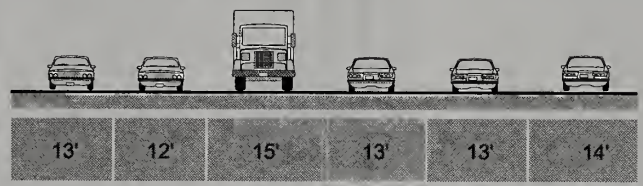
Option 1



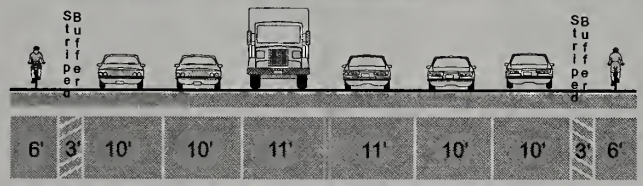
Option 2

Ⓓ Putnam St. to 101/280

Existing



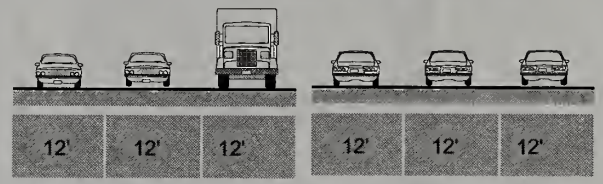
Option 1



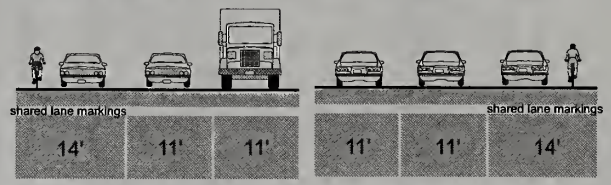
Option 2

Ⓔ Alemany Circle (alternates between 2 and 3 lanes)

Existing



Option 1



Option 2

BIKE PLAN UPDATE

Alemany
Justin Dr. to Industrial

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DRAFT 12/05/03

Alemany St. Cross-Section Concept Sheet 2 of 2
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

SUMMARY SHEET

BAYSHORE BOULEVARD, US 101/PAUL TO CESAR CHAVEZ

Project Description

Bayshore Boulevard is a moderately-high volume arterial that parallels US 101 in southeastern San Francisco. Bicycle improvements to Bayshore Boulevard could provide an important north-south connection between Third Street and Cesar Chavez Street. The Third Street Light Rail Project will provide bike lanes to allow cyclists to continue to the southern limits of the city. These can be accessed from Bayshore via the existing bike lane/route on San Bruno.

In general, this portion of Bayshore Boulevard has two lanes of travel in each direction with parking on one or both sides of the street. Between Industrial and Cesar Chavez to the north, the roadway widens to include four travel lanes in each direction. Depending on the specific segment's land use and traffic patterns, a combination of parking lanes and/or travel lanes may be removed to provide the necessary width for bike lanes.

History/Background

Improvements on Bayshore and connections between Bayshore and other bike routes were recommended in the 1997 SF Bicycle Master Plan. The plan recommended a new path near the south side of Cesar Chavez and recommends a long-term solution of a bike overpass over Cesar Chavez beginning just west of the US 101 on-ramps to the Potrero Avenue crossover.

Design Segments

- San Bruno Avenue, Mansell Street to Paul Street: This segment of San Bruno Avenue is a narrow two lane roadway with one traffic lane in each direction. Implementation of bicycle lanes would require narrowing of the existing travel lanes. Potential transit impacts are a chief concern for this segment; requiring additional analysis and identification of potential mitigation measures to offset any identified increases in traffic congestion (see "Transit" discussion below).
- Paul to Fitzgerald: Currently, there are four travel lanes with on-street parking on both sides. Bike lanes could be added on both sides of the street by narrowing each travel lane by six inches and removing parking on the west side of the street. Elimination of travel lanes may be possible depending on the results of more detailed traffic analysis and potential impacts to transit. These transit impacts must be considered carefully, particularly given Muni plans to expand transit service on the Bayshore corridor (see "Transit" discussion below) Lane removal could enable implementation of bicycle lanes while preserving existing parking.
- Fitzgerald to Silver: Currently, there are four travel lanes with on-street parking on both sides Bike lanes could be added on both sides of the street by removing parking on both sides of the street. *Transit discussion above under Paul to Fitzgerald applies to Fitzgerald to Silver.*
- Silver to Industrial: Currently, there are four travel lanes with restricted/limited parking on the north side. Bike lanes could be added on both sides of the street by narrowing the

southbound outside travel lane and remove parking on the east side of the street. *Transit discussion above under Paul to Fitzgerald applies to Silver to Industrial.*

- Industrial to US 101 Off-Ramp: This segment is seven travel lanes with parking on both sides. Bike lanes could be added on both sides of the street by eliminating one travel lane in each direction. This also leaves room for a buffer between parked cars and the bike lanes. A bike lane could also be possible by narrowing the existing lanes. A second option for this segment is to route the southbound bicycle lane along Phelps Street and not along this segment of Bayshore. The bicycle connection through the intersection of Phelps and Bayshore would require special consideration.
- US 101 Off-Ramps to Cesar Chavez: Currently, there are three travel lanes in the southbound direction and four lanes in the northbound direction. Bike lanes could be added on both sides of the street by narrowing lanes by removing parking on both sides of the street. Additional detailed analysis of this segment is required to ensure proper separation and merging of traffic streams in order to ensure bicyclist safety.

Capacity

- The specific impact of travel lane reductions to traffic operations on Bayshore will need to be studied further. Because Bayshore parallels US 101, traffic volumes will fluctuate based on the varying traffic conditions of US 101. **The DPT has acquired traffic count at key locations along Bayshore and at critical intersections. These counts will be integrated into the analysis.**

Transit

- Transit impacts are addressed by segment:
    - San Bruno, Mansell to Paul: San Bruno is a congested street, carrying several major bus lines. The 9,9X, 9AX and 29 bus lines run on San Bruno between Mansell and Paul and would turn across the bike lane at these intersections. Careful consideration needs to be given to avoid bus/bike conflicts at those intersections.
    - Paul to Fitzgerald: There are no bus lines running on this segment.
    - Fitzgerald to Silver: The 9X and 9AX bus lines run on this segment. The 54-Felton and the 44-O'Shaughnessy, frequently cross Bayshore Boulevard. Consideration must be given to intersection treatments at these locations.
    - Silver to Industrial: The Inbound 9, 9AX run on this segment and the Inbound 14X running on Alemany Boulevard frequently crosses Bayshore.
    - Industrial to US 101 Off Ramp: The 9, 9X, 9AX bus-lines, and the 23 and 24 bus-lines run on Bayshore Boulevard on this segment. Eliminating two travel lanes and implementation of a center turn lane and bicycle lanes may delay Muni buses. Additional analysis is required to determine that this alternative will not cause transit delays or another alternative is required that will not cause transit delays.
    - US 101 Off Ramp to Cesar Chavez: This is a complex traffic area requiring more detailed analysis to determine if bicyclists should be encouraged to use this area. A clear alternative must be developed demonstrating how bicyclists can be safely routed through the 101/Bayshore/Cesar Chavez maze. These safety concerns must be addressed to protect bicyclists and ensure that additional transit delays are not created.

Parking

- Based on the recommendations for the installation of bike lanes, on-street parking spaces will be removed at specific locations under some options. This will occur along sections with low-density industrial land uses where adequate off-street and side street parking exist. Also, some sections, such as the segment near Silver St., parking is already restricted to off-peak time periods. About ___ spaces will be removed. **DPT has performed a parking supply inventory and approximated the current use at this location.**

Trucks

- Bayshore Boulevard is used frequently by trucks and oversized vehicles.

Pedestrian Concerns

- The proposed bicycle improvement benefit pedestrians by decreasing the effective crossing distance across Bayshore. While the curb-to-curb distance will remain constant, the number of travel lanes will be reduced, so crossing at signalized or unprotected crosswalks will be simplified.
- On the other hand, the proposed improvements that call for the removal of parking may decrease the comfort of pedestrians along these sections of the sidewalk, due to the elimination of the buffer of parked cars.

Land Use

- The land use surrounding Bayshore is primarily industrial and Bayshore thus serves a good deal of truck traffic. Residential and other non-industrial land uses are also prevalent along the east side of Bayshore south of Silver Street. There are no known conflicts with the existing land uses.

Other Departments or Agencies

- No other departments or agencies will be affected the proposed changes to Bayshore Blvd.

Next Steps

- Capacity analyses associated with the travel lane reductions should be conducted by DPT.
- Potential mitigation for parking loss should be identified based on the recently acquired counts.

1. Bay Shore, looking north. This section of Bay Shore has 2 lanes of travel in each direction and on-street parking on the east side of the street.

2. San Bruno, looking north. This section of roadway parallels Bay Shore and provides a good bike connection between Bay Shore and 3rd Street to the south.

3. Bay Shore, near industrial, looking south. This section of Bay Shore has two travel lanes in each direction and no on-street parking.

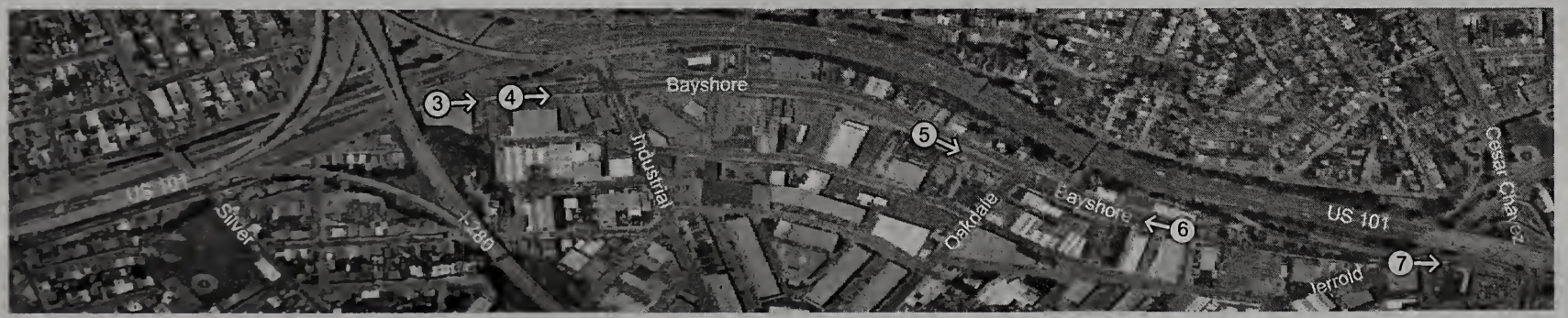
4. Bay Shore at Helena, looking north. This section of Bay Shore has two travel lanes in each direction and no on-street parking.

5. Bay Shore near Oakdale, looking north. This section of Bay Shore has 6 travel lanes and parking on both sides of the street.

6. View of overhead lines on Bay Shore, looking south. These lines may need to be adjusted if roadway striping is modified.

7. Bay Shore approaching Cesar Chavez, looking north. In this section, Bay Shore becomes a one-way couplet, with four lanes in each direction.

8. The current bike route (25) on Bayshore connects to Cesar Chavez using a narrow sidewalk. The roadway crossings in this section are also challenging.



BIKE PLAN UPDATE

BAYSHORE BLVD.
CESAR CHAVEZ TO I-280

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THIS IS A REPRESENTATIVE DIAGRAM AND IS NOT BASED ON ACTUAL SURVEY DATA.
ALL INFORMATION PRESENTED IN THIS DIAGRAM IS SUBJECT TO MODIFICATION.

DRAFT 12/16/03

BAYSHORE BLVD. EXISTING CONDITIONS SHEET 1 OF 1 (CESAR CHAVEZ TO I-280)
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

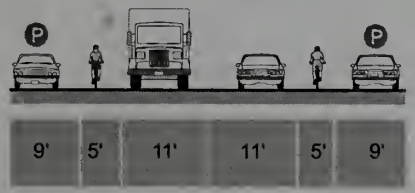
Street Cross-Section Typicals (looking north towards Cesar Chavez)

Ⓐ San Bruno, Mansell to Paul

Existing

NOTE: Transit bus service on this segment requires careful analysis to avoid potential right-side conflicts, and potential conflicts with bus turns onto intersecting streets.

Option 1

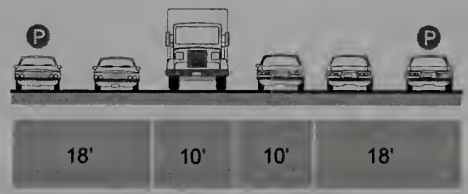


Option 2

No change

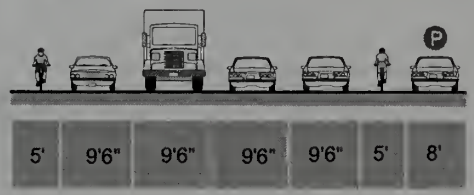
Ⓑ Paul to Egbert

Existing

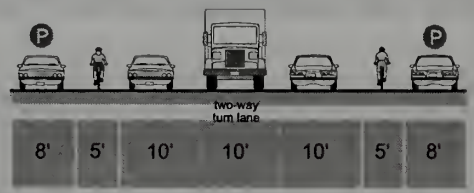


NOTE: Roadway and lanes widen north of Egbert to Fitgerald where the west 6-foot wide sidewalk is discontinued. There is no transit service on this segment of Bayshore.

Option 1

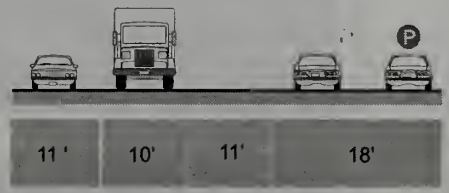


Option 2



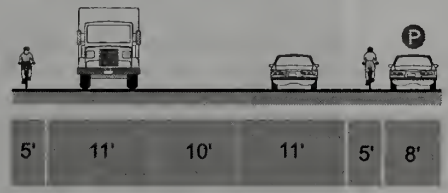
Ⓒ Egbert to Silver

Existing

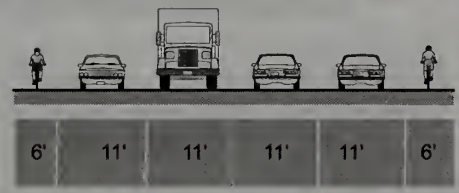


NOTE: Variations in lane width and configuration at intersections requires additional detailed analysis to finalize design concept.

Option 1



Option 2



NOTE: Elimination of center turn lane and median require detailed analysis and design to eppopriate transitions at intersections with turn lanes

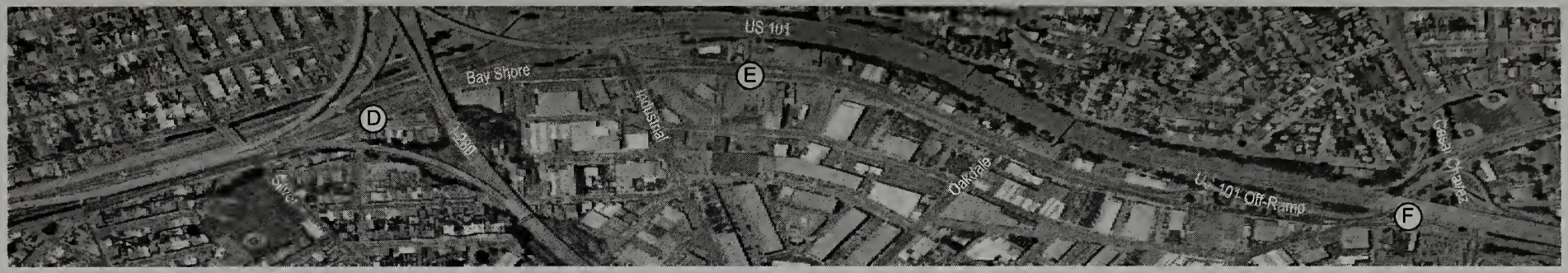
Bayshore Blvd

US101 (Paul) to Cesar Chavez

This draft diagram is designed for public input and discussion purposes. This is a representative diagram and is not based on actual survey data. All information presented in this diagram is subject to modification.

DRAFT 4/5/04

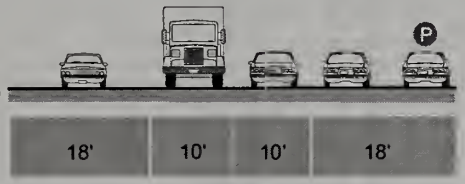
Bayshore Blvd. Cross-Section Concept Sheet 1 of 2
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets



Street Cross-Sections (looking north towards Cesar Chavez)

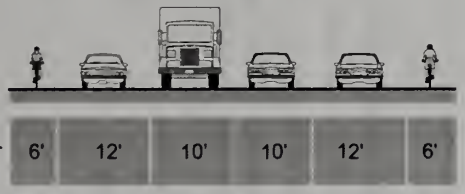
Ⓓ Augusta to Industrial

Existing

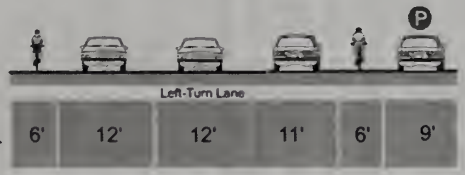


NOTE: Northbound Bayshore at Industrial widens to four ten-foot lanes, beginning 150 feet south of the intersection. This segment requires separate traffic analysis and design development.

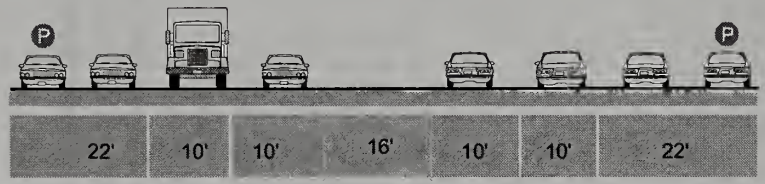
Option 1



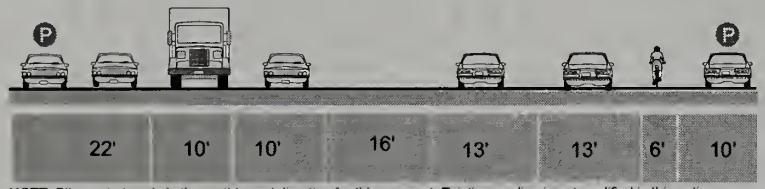
Option 2



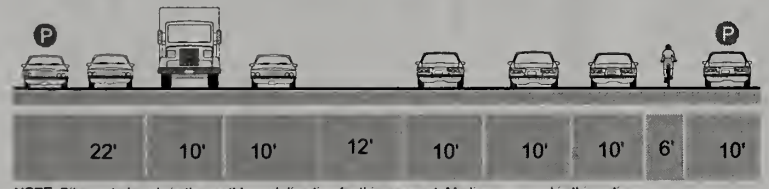
Ⓔ Industrial to US101 Off-Ramp



NOTE: Variations in lane widths will effect intersection transitions and bike lane widths for various segments. Lane widths vary along this segment one to two feet greater than the predominant dimensions shown.

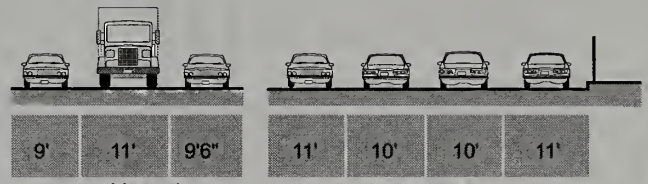


NOTE: Bike route is only in the northbound direction for this segment. Existing median is not modified in this option.



NOTE: Bike route is only in the northbound direction for this segment. Median narrowed in this option.

Ⓕ US101 Off-Ramp to Cesar Chavez



NOTE: Northbound Bayshore connection to Cesar Chavez requires sidewalk improvements to provide for bicyclist passage through the Jerrold Avenue intersection and to provide access to Marin Street.

BIKE PLAN UPDATE

Bayshore Blvd.

US 101/ Paul to Cesar Chavez

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DRAFT 4/5/04

Bayshore Blvd. Cross-Section Concept Sheet 2 of 2
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

BROADWAY TUNNEL

VAN NESS AVENUE TO COLUMBUS AVENUE

SUMMARY SHEET

Project Description

Broadway Street is a moderate-volume roadway in the northeastern part of San Francisco. The Broadway Tunnel provides an important east-west connection from the Pacific Heights area and Chinatown and the Financial District. Currently, experienced cyclists follow the 210 Route using the narrow outside motor vehicle lanes in the tunnel. Eastbound bicyclists use the south bore along with eastbound vehicle traffic, and westbound bicyclists use the north bore along with westbound vehicle traffic. Bicyclists in both directions are exposed to high-speed traffic and limited visibility. Although cyclists are currently prohibited from riding on the tunnel's sidewalks by City legislation, the majority of bicyclists that use the tunnel ride on the existing sidewalks. Route 10 provides a circuitous and hilly route over the tunnel following Pacific Avenue. Under this proposed project, Route 10 would continue to serve less experienced bicyclists or bicyclists who do not wish to ride through the tunnel.

History/Background

Routes 10 and 210 are discussed in detail in the 1997 Bike Plan. Recommendations for improvements to the Broadway Tunnel in the 1997 Bike Plan included: (a) design the sidewalk in the westbound tunnel for bicyclists and advise pedestrians to use the sidewalk in the eastbound tunnel, (b) widen the westbound tunnel sidewalk by relocating the rail to the lower ledge, thereby increasing usable width, and also rebuilding the lower ledge adjacent to the sidewalk to add this width, (c) provide adequate shy distance for vehicles from the relocated rail by re-striping traffic lanes to 10' and striping an edge line to keep cars away from the relocated rail, (d) sign eastbound sidewalk (in the south tunnel) for pedestrians only, and (e) install a push button activated flashing yellow beacon with a sign that reads "BIKES IN TUNNEL WHEN LIGHTS FLASHING." DPT and DPW have made preliminary investigations of the costs and engineering requirements associated with widening the existing sidewalks and changing legislation to allow for bicycle use of sidewalks. The fire hydrants on the sidewalk in both tunnel bores have been replaced by the standpipes in the walls below the sidewalks, as recommended in the 1997 Bicycle Plan. This has increased the clear sidewalk width by a few inches at each former fire hydrant location.

Design Segments

Option 1 Design:

Extinguishable message signs[1] (EMSs) are recommended for the westbound and eastbound approach, the entry face of each tunnel, and at key locations within the tunnel where drivers'

[1] EMSs are signs that are internally illuminated and have an on- and off- condition. These signs typically communicate a very short message that is either off most of the time or on most of the time, depending on the condition that is described. For this case, the conditions that is described is brief and temporary, therefore, the sign will be off, and non-visible when not activated.

perspective view is changed due to changing tunnel roadway geometry. This extinguishable signage must be accompanied by appropriate activation technology readily accessible to bicyclists in a protected location on the edge of the roadway along the approach to the tunnel entry. Activation technologies include push-button activation, microwave detection, and other sensor based activators. Push button activation is recommended to ensure that bicyclists are aware of high-speed traffic and limited separation when entering the tunnel. The extinguishable message sign should read, "BIKES IN TUNNEL," with a placard sign mounted below reading "WHEN FLASHING." The signage assembly should include a yellow flashing beacon mounted at top. This configuration is shown as Option 1 on the Concept Design Sheet. This recommendation is for the eastbound (south tunnel) direction only. Westbound bicyclists would be directed to use the sidewalk in the north bore due to the steep uphill grade in the westbound direction, and the significant speed differential between vehicles and bicyclists traveling uphill. This would require repeal of the legislation prohibiting bicycle use of the westbound sidewalk.

Option 2 Design:

Five inches of usable sidewalk can be gained by relocating the existing rail to the lower ledge in the existing curb, sidewalk configuration. This rail relocation would facilitate passage of bicyclists and pedestrians in the tunnel. A change in legislation allowing bicyclist's use of the existing sidewalks is required to accompany this design option for the north bore, providing for westbound bicyclists. This treatment is recommended for the north bore.

This option would require crossings west and east of the existing tunnel entrances to allow bicyclists to access the south tunnel from various origin and destination points north and south of the Broadway corridor.

Option 3 Design:

16 inches of usable sidewalk can be gained by reconstructing the ledge adjacent to the sidewalk so that it is part of the sidewalk. This would not change the location of the existing curb face. The resulting sidewalk would be 5'-3", less the width required for rail placement. A change in legislation allowing bicyclist's use of the reconstructed sidewalks is required to accompany this design option for both directions.

This treatment could be used in the south bore (westbound) only along with signage recommending that pedestrians use the north bore (eastbound). This option would require that cyclists cross Broadway west and east of the existing tunnel entrances to allow them to access the south tunnel sidewalk from various origin and destination points north and south of the Broadway corridor.

Option 4 Design:

Lane narrowing to create two 10'-6" traffic lanes would allow for reconstruction of the sidewalk, curb and drainage inlet configuration to create an approximately 6' sidewalk. A change in legislation allowing bicyclist use of the reconstructed sidewalks is required to accompany this design option for both directions.

This treatment could be used in the south bore (westbound) only along with signage recommending that pedestrians use the north bore (eastbound). This option would require that cyclists cross Broadway west and east of the existing tunnel entrances to allow them to access the

south tunnel sidewalk from various origin and destination points north and south of the Broadway corridor.

Capacity

- Capacity will not be affected since travel lanes will not need to be removed.

Parking

- Parking will not be affected.

Transit

- Muni service on Broadway Street and intersecting streets will not be affected by the proposed changes.

Pedestrian Concerns

- The proposed bicycle improvements within the Broadway Tunnel will benefit pedestrians by providing more space for both bicyclists and pedestrians. Currently, both bicyclists and pedestrians share the narrow (3'-6") sidewalks in the Broadway Tunnel.
- Legislation change is required to allow bicyclists to use the existing sidewalk. Regardless of the design option selected, it is recommended to change the legislation prohibiting bicyclists on the sidewalks and to provide signage alerting bicyclists and pedestrians to expect one another and to exercise caution and courtesy when negotiating the narrow sidewalk. The current prohibition is ineffective, evidenced by the fact that most bicyclists using the tunnel use the sidewalk rather then the roadway.
- Options 2,3, & 4 advise pedestrians to use only the south bore (eastbound)

Land Use

- The majority of the surrounding area is residential. No changes in land use designations would be necessary.

Next Steps

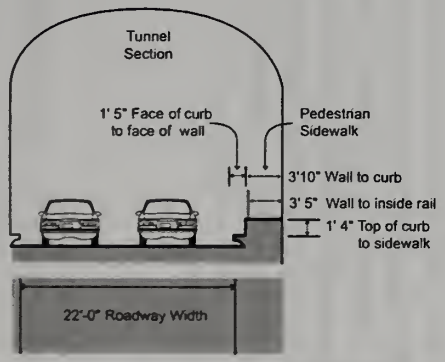
- Drainage in the tunnel should be researched and the feasibility of widening the sidewalks should be explored.
- Legislate allowances for sidewalk riding for westbound direction in north bore of tunnel.
- Finalize design for bicycle actuation of proposed signage, if proposed.
- Develop PS&E.

○ Proposed extinguishable sign location

STREET CROSS-SECTIONS

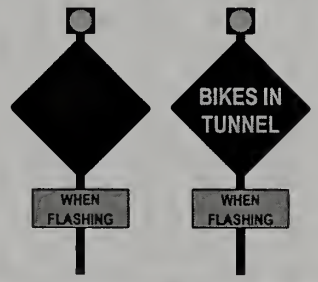
Ⓐ NORTH BORE (FACING WEST)

EXISTING


Tunnel Section
1' 5" Face of curb to face of wall
Pedestrian Sidewalk
3'10" Wall to curb
3' 5" Wall to inside rail
1' 4" Top of curb to sidewalk
22'-0" Roadway Width

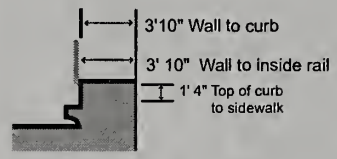
OPTION 1

Extinguishable signage on approach and in tunnel. Recommended locations indicated above on aerial with white circle. (See Project Summary for Discussion)



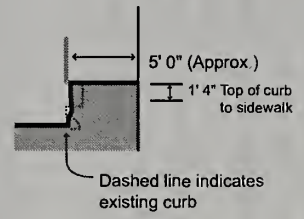
OPTION 2

Relocate rail to outside face of the existing elevated sidewalk



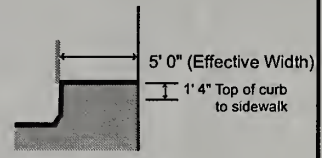
OPTION 3

Modify curb drainage inlet to increase usable sidewalk width



OPTION 4

Narrow roadway to two 10' 6" lanes and modify curb drainage inlet to increase usable sidewalk width



BIKE PLAN UPDATE

BROADWAY TUNNEL

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DRAFT 4/16/04

BROADWAY TUNNEL CROSS-SECTION CONCEPT SHEET
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

BIKE PLAN UPDATE

SUMMARY SHEET

CESAR CHAVEZ STREET, SANCHEZ TO I-280

Project Description

Cesar Chavez Street is a moderately-high volume arterial in central-eastern San Francisco. Bicycle improvements to Cesar Chavez Street would provide an important east-west connection, linking Noe Valley, Diamond Heights with the Mission, and Potrero Hill. The project would also provide a key connection to the Bayview and other southeastern neighborhoods.

Most of Cesar Chavez has either two or three lanes of travel in each direction with parking on both sides of the street. Depending on the specific segment's land use and traffic patterns, it may be necessary to remove either parking lanes or travel lanes to provide the necessary width for bike lanes.

An alternative to providing striped bike lanes on Cesar Chavez would be to designate a lower-volume, parallel roadway as a "Bike Boulevard." (For representative detail, see the San Francisco Bicycle Plan Update Supplemental Design Guidelines, Treatment 12, page 19. This figure is attached to this project summary.) The bike boulevard treatment could include traffic calming treatments such as traffic circles and diverters to slow vehicular speeds and discourage cut-through automobile traffic. In addition, stop signs could be removed on the boulevard or re-oriented towards intersecting streets to allow continuous movement by bicyclists on the bike boulevard. Based on preliminary observations, either 25th Street or 26th Street could be designated as a bike boulevard between Sanchez and Hampshire. Of the two, 26th Street may be preferable due to the fact that it is less steep between Dolores and Fair Oaks and that it has two fewer stop signs.

History/Background

The 1997 Bicycle Plan recommended removal of the concrete median and relocation of the median street lights in order to re-stripe the street with wide curb lanes between Potrero Avenue and Guerrero Street. This was not pursued due to the high cost and minimal benefits. However, a one-block, part time (Monday to Friday, 7AM to 6PM, and Saturday/Sunday, 9 AM to 6 PM) eastbound bike lane was striped between York and Hampshire Streets. A westbound bike lane between Hampshire and Bryant Streets was proposed but not implemented due to neighborhood concern about parking loss. Existing bicycle lanes on Cesar Chavez between York Street and Hampshire Street are regularly blocked by parked vehicles, requiring design modification or increased enforcement of parking violations.
Two other planning efforts, the North Bernal Heights Traffic Calming Plan and the SE Mission Pedestrian Safety Plan should be considered throughout the Chezar Chaves Street bicycle planning process. Specifically, spillover traffic from any congestion on Cesar Chavez Street would exacerbate existing cut-through traffic issues that the North Bernal Heights Traffic Calming Plan is seeking to mitigate.

Design Segments

- Sanchez to Guerrero: This section could be signed as a bike route and possibly stenciled with the new shared-lane pavement markings. Bike lanes are not recommended for this section because the low volume and the lack of available width.
- Guerrero to US 101: To provide for bike lanes, a travel lane would need to be removed in each direction in this section. Currently, there are three travel lanes in each direction.
- If the median is maintained for this segment, vehicle left turn pockets in conjunction with pedestrian crossing improvements should be considered at key intersection on this segment where travel lane removal is required for bicycle lane implementation. Unsignalized intersections should be given priority for this treatment. This option suggested by SFBC requires additional explanation.
- US 101 to I-280: To provide for bike lanes, the on-street parking on the north side of the street (westbound) could be removed. Colored bike lane treatments across the highway on- and off-ramps may also be used to help highlight the presence of bicycles across these high-conflict areas. This section would make use of the asphalt path underneath US 101. Other crossing treatments would be needed to allow bicyclists to cross safely.

Capacity

- The impact of travel lane reductions to traffic operations on Cesar Chavez, between Guerrero and US 101 will need to be studied further. Capacity issues are important to maintaining MUNI operations and preventing spillover traffic to neighborhood streets.
- **New traffic counts will be acquired by DPT and will be integrated into the analysis.**

Transit

- MUNI operates bus service on Cesar Chavez. Bus service may be impacted by the implementation of bicycle lanes due to potential bus/bike conflicts and reduction of capacity. Current service includes:
    - Route 19 from Evans Street to Connecticut Street with PM peak service frequency at 10 minutes
    - Route 27 from Bryant Street to Mission Street with PM peak service at 12 minutes
    - Route 12 from South Van Ness Avenue to Mission Street with PM peak service at 10 minutes
- Additional future MUNI bus service may be added on Cesar Chavez between Guerrero and Third Streets.
- MUNI service exists on 26th Street eastbound between Valencia Street and Folsom Street.

Parking

- Based on the recommendations for the installation of bike lanes, on-street parking spaces will be removed on the north side of the street between US101 and I-280. This will occur along sections with low-density industrial land uses where adequate off-street and side street parking exist. About 76 spaces will be removed along the northside of the street, 25 of which were occupied on a weekday afternoon. All occupied spaces were between Connecticut and Mississippi Streets. No spaces were occupied between Connecticut and Kansas Streets.

Trucks

- Cesar Chavez has a relatively high volume of trucks and oversized vehicles. The Transportation Element of the General Plan designates Cesar Chavez as a "route with significant truck traffic," between 3rd and US 101.

Pedestrian Concerns

- The proposed bicycle improvement benefit pedestrians by decreasing the effective crossing distance across Cesar Chavez. While the curb-to-curb distance will remain constant, the number of travel lanes will be reduced, so crossing at signalized or unprotected crosswalks will be simplified.
- On the other hand, the proposed improvements that call for the removal of parking between US101 and I-280 may decrease the comfort of pedestrians along these sections of the sidewalk, due to the elimination of the buffer of parked cars.
- Currently, through the SE Mission Pedestrian Safety Plan, the Department of Parking and Traffic Livable Streets program is conducting planning for neighborhood traffic calming and potential pedestrian crossing and intersection improvements on Cesar Chavez.
- A four or five foot wide pedestrian refuge could be incorporated into Option 2 if travel lanes and/or parking lanes are narrowed.

Land Use

- The land use along most of Cesar Chavez is primarily residential, with some retail uses. No land use conflicts would be associated with the proposed changes.

Other Departments or Agencies

- MUNI should be involved with the development of plans on Cesar Chavez Street that may affect their service.

Next Steps

- Capacity analyses associated with the travel lane reductions should be conducted by DPT. This will incorporate newly acquired traffic counts.
- More precise identification and potential mitigation for parking loss should be identified.
- Cost estimates for removing any or all of the median need to be determined. Note that the SE Mission Pedestrian Safety Plan estimates that this cost would be greater than one million dollars.
- When considering any proposed changes, consult with the North Bernal Heights Traffic Calming Plan and the SE Mission Pedestrian Safety Plan.

BICYCLE BOULEVARD

The bicycle boulevard treatment is typically a lower volume street with traffic calming treatments that parallels a higher volume arterial. Traffic calming typically includes a set of improvements to slow traffic and prevent cut-through traffic such as: traffic circles, chokers, and medians. In addition, stop signs favor bicyclists by stopping perpendicular traffic. Push-buttons activate traffic signals to allow safe crossings of higher volume roadways.

POT

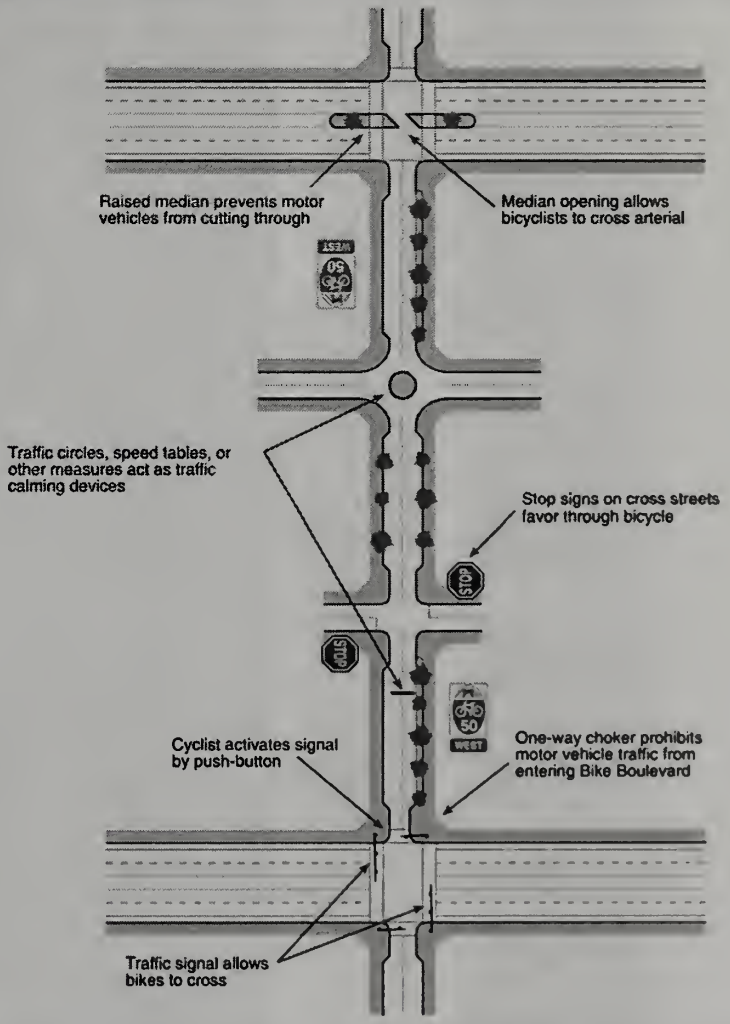
volume streets

on streets
rallel

rials

- Allows access to key destinations
- Provides safe arterial street crossing

GRAPHIC


Raised median prevents motor vehicles from cutting through
Median opening allows bicyclists to cross arterial
Traffic circles, speed tables, or other measures act as traffic calming devices
Stop signs on cross streets favor through bicycle
Cyclist activates signal by push-button
One-way choker prohibits motor vehicle traffic from entering Bike Boulevard
Traffic signal allows bikes to cross

NOTES

20 mph speed limits should be considered.

SELECTED LOCATIONS WHERE TREATMENT IS USED

- Portland, OR
- Palo Alto, CA
- Berkeley, CA
- Vancouver, BC

Cesar Chavez

1. 25th et Sanchez, looking east. 25th is a residential street that parallels Cesar Chevez end could be used es a bicycle boulevard.

2. 26th at Church, looking east. 26th mey also be used es a bicycle boulevard. The segment between Sanchez and Harrison has 2 fewer stop signs and less grede changes than 25th.

3. 26th at Mission, looking east. ??? Castro end Clipper ???

4. 25th et Treat, looking east. This segment is primarily residential with a low traffic volume.

5. Ceser Chavez hes 4 lenes of travel with e central median and parking on both sides. This segment also has a lot of intersecting driveways.

6. Ceser Chevez et Herrison, looking east. This section of Cesar Chavez has 4 lanes of traffic and perking on both sides.

7. Cesar Chevez at Evans, looking west. This section of Ceser Chavez has 4 lanes of traffic and parking on both sides.

8. Ceser Chavez et indiana, looking west. This section of Cesar Chavez has striped bike lanes between Pennsylvania and Third Street.

SF BIKE PLAN UPDATE

Cesar Chavez

Sanchez to I-280

This draft diagram is designed for public input and discussion purposes.
This is a representative diagram and is not based on actual survey data.
All information presented in this diagram is subject to modification.

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SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

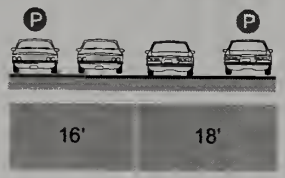
Cesar Chavez Corridor Existing Conditions Sheet 1 of 1 (Sanchez to I-280)
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

STOP east-west stop signs

Street Cross-Section Typicals (looking east towards Third Street)

Ⓐ Sanchez to Guerrero

Existing



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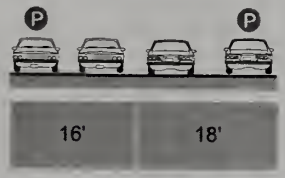
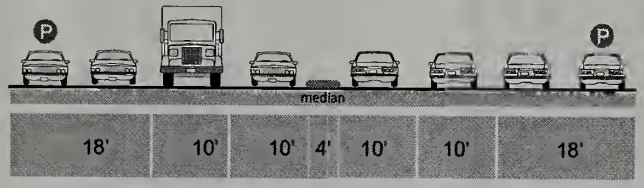


Sign and treat as a shared roadway

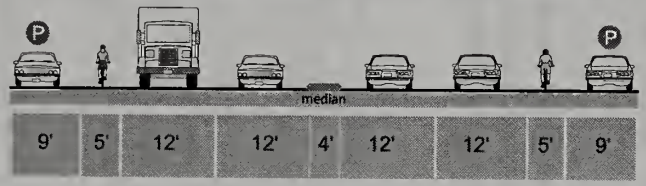
Option 2

Ⓑ Guerrero to US 101

Existing



Option 1



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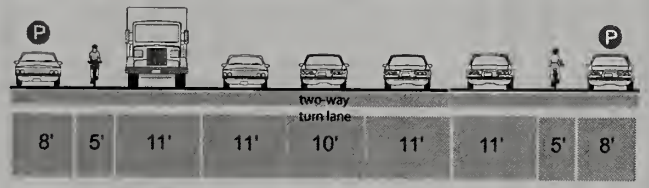
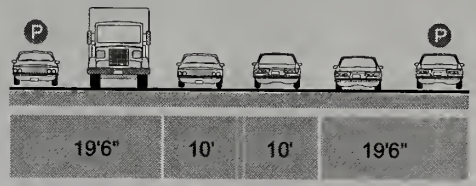
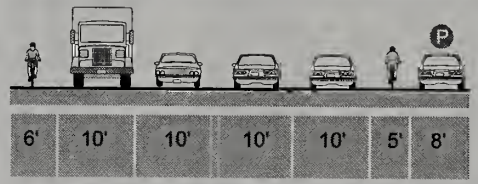
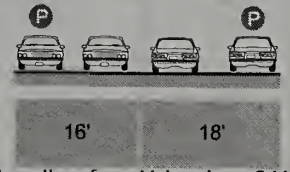


Ⓒ US101 (Kansas) to I-280 (Mississippi)





Neighborhood Option (using 26th Street)



Double yellow from Valencia to S.Van Ness

BIKE PLAN UPDATE

Cesar Chavez
Sanchez to I-280

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SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

Cesar Chavez Street Cross-Section Concept Sheet 1 of 1
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

FELL STREET/MASONIC AVENUE INTERSECTION

SUMMARY SHEET OUTLINE

General Project Description

The existing Golden Gate Park Panhandle bike path (administered by the San Francisco Recreation and Park Department) crosses Masonic Avenue at the south side of the Masonic Avenue and Fell Street intersection. This is a high volume bicycle commuter and recreation path and a high volume roadway intersection.

The existing standard parallel-striped crosswalk on Masonic Avenue, on the south side of the Fell Street /Masonic Avenue intersection, is set back approximately 10 feet from the existing intersection corners. This condition reduces visibility for both motorists and bicyclists. Westbound motorists turning left from Fell Street onto southbound Masonic Avenue sometimes cannot adequately see bicyclists and pedestrians using the crosswalk. Westbound bicyclists are particularly difficult for motorists to see, as they can be visually blocked by trees, utility poles and parked vehicles until they have entered into the intersection. Bicyclists cannot easily see approaching left-turning vehicles as they are leaving the path and entering the intersection crosswalk.

The proposed crossing improvement addresses both the visibility and vehicle speeds. Three design options are provided, including: Short-Term, Long-Term 1 and Long-Term 2. The three design conditions are summarized below under Design Segments.

History/Background

This pathway crossing is a recognized concern due to the high volumes of commuter and recreational bicyclists that use the crossing, and due to the high volumes of vehicle traffic using the Fell Street /Oak Street couplet, as well as Masonic Avenue for cross-city travel.

Recent improvements to the path and the crossing include widening, repaving, and lighting the path; establishing a 10 foot red zone along the south side Fell Street approach to Masonic Avenue to improve sight lines, installation of signs directing left turning vehicles to yield to pedestrians and bicyclists, the installation of pedestrian countdown signals, and the construction of wide curb ramps.

A longer No Parking/red zone along the Fell Street approach has been considered but concerns of illegal parking in a long, seemingly unneeded red zone led to the implementation of a 10 foot zone. A longer zone would improve sightlines if it can be kept clear of illegally parked vehicles, either with enforcement or with physical design elements such as a curb extension.

Moving the path crossing closer to the intersection was also considered during the recent path work, but the benefits of doing so without other improvements such as the curb extensions proved to be minimal. Also, a signal pole and a catch basin located in the path of such a crossing reduced the cost benefit ratio to a point where the realignment was not included with the path work.

Design Segments

Option A:

The proposed short-term design relies on the following design features:

- An expanded parking prohibition on Fell Street, extending the No Parking zone from the southeast corner approximately 60 feet east to increase visibility of the Panhandle Path from westbound Fell Street (this would result in the loss of approximately three on-street parking spaces).
- Advance Walk phase to allow bicyclists and pedestrians to get a "head start" on motor vehicles when the signal changes from red to green. Left turning vehicles from Fell Street onto Masonic Avenue will be held for extra seconds to allow path users to establish themselves in the crosswalk.
- High-visibility "ladder" crosswalk will provide higher visibility than existing parallel stripe crosswalk at current crosswalk location.
- Relocated stop limit line for northbound Masonic Avenue to keep vehicles out of the crosswalk and increase safe operating space for bicyclists and pedestrians.
- Installation of unique signage at appropriate height and orientation to ensure visibility to motorists and limit visibility to trail users (to the extent possible). The graphic and/or textual message should focus on encouraging motorists to yield to pedestrians and bicyclists in the crosswalk. Options for unique signage specific to this application are included in the Supplemental Design Guidelines for the Bicycle Plan Update.
- Optional "safe-hit" posts may be installed on the centerline stripe of Masonic Avenue immediately north of the crosswalk stripe in order to encourage left turning vehicles from Fell Street to make slower, tighter radius turns (this optional feature may have a short life-span due to limited durability of safe-hit posts).

Option B:

This proposed design relies on the following design features:

- Curb extensions on both sides of Masonic Avenue on the south side of Fell Street in order to create a tighter turning radius for vehicles and effectively slow turning speeds. This also will create more space for the path to be realigned closer to the intersection.
- An expanded parking prohibition on Fell Street, extending the No Parking zone from the southeast corner approximately 60 feet east to increase visibility of the Panhandle path from westbound Fell Street (this would result in the loss of approximately three on-street parking spaces).
- Advance Walk phase to allow bicyclists and pedestrians to get a "head start" on motor vehicles when the signal changes from red to green. Left turning vehicles from Fell Street onto Masonic Avenue will be held for extra seconds to allow path users to cross more safely.
- Relocated high-visibility "ladder" crosswalk will provide higher visibility than existing parallel stripe crosswalk.
- Relocated stop limit line for northbound Masonic Avenue to keep vehicles out of the crosswalk and increase safe operating space for bicyclists and pedestrians.
- Slight reorientation of path to deliver path users directly to the intersection and new cross-walk to ensure that they are crossing in the most visible location

- Installation of unique signage at appropriate height and orientation to ensure visibility to motorists and limit visibility to trail users (to the extent possible). The graphic and/or textual message should focus on encouraging motorists to yield to pedestrians and bicyclists in the crosswalk. Options for unique signage specific to this application are included in the Supplemental Design Guidelines for the Bicycle Plan Update.
- Optional "safe-hit" posts may be installed on the centerline stripe of Masonic Avenue immediately north of the crosswalk stripe in order to encourage left turning vehicles from Fell Street to make slower, tighter radius turns (this optional feature may have a short life-span due to limited durability of safe-hit posts).

Option C (Dedicated Left-Turn Signal Phase):

A third option for this location is to re-phase and re-time the existing signalization at Fell Street/Masonic Avenue to provide for a dedicated left-turn phase and a protected bike/pedestrian crossing phase. Left-turning vehicles from westbound Fell Street onto southbound Masonic Avenue would be held (with a red turn arrow) during the dedicated bicycle/pedestrian phase. After this phase, left-turning traffic would either receive a green arrow, or a flashing yellow arrow. Under the green arrow scheme, vehicles would have the right-of-way. Under the flashing yellow arrow condition, motorists would be informed to yield to bicyclists and pedestrians using the crosswalk. This long-term feature includes the following:

- Installation of exclusive left turn lane if traffic volumes on westbound Fell Street.
- Modify signal phasing and timing to provide left-turn arrow for westbound Fell Street and protected bicycle and pedestrian phasing across the intersection's southern leg.
- Revise Fell Street's lane markings and transitions upstream and downstream of Masonic Avenue.
- No parking removal is required for this option.
- Optional "safe-hit" posts may be installed on the centerline stripe of Masonic Avenue immediately north of the crosswalk stripe in order to encourage left turning vehicles from Fell Street to make slower, tighter radius turns (this optional feature may have a short life-span due to limited durability of safe-hit posts).

Capacity

Option A

- Assuming pedestrians and bicyclists are given a three-second "head-start" by shortening the amount of green time on Fell Street or Masonic Avenue by three seconds, westbound motorist delays would increase by an average of two seconds per vehicle and queue lengths would increase by one to two cars per lane. Westbound vehicle progression would be affected and signal timing along the Fell Street corridor should be evaluated to minimize disruption. The intersection would continue to operate at LOS B conditions.

Option B

- Assuming pedestrians and bicyclists are given a three-second "head-start" by shortening the amount of green time on Fell Street or Masonic Avenue by three seconds, westbound motorist delays would increase by an average of two seconds per vehicle and queue lengths would increase by one to two cars per lane. Westbound vehicle progression would be affected and signal timing along the Fell Street corridor should be

evaluated to minimize disruption. The intersection would continue to operate at LOS B conditions.

Option C

- Under this option, Fell Street's through lanes would be reduced from four to three. During the PM peak hour, over 1,800 vehicles use these lanes. This option would degrade the intersection's level-of-service and would require lane striping to the east of the intersection to merge westbound through traffic into the second lane. After traveling through the intersection, some westbound traffic would move into the first lane. The frequent lane-changing could result in an increase in vehicle collisions. Therefore, if this option were to be further pursued, it is recommended that a large segment of Fell Street be converted to three through lanes for lane balance purposes. This may be a feasible solution after the Octavia Boulevard project has been constructed.

  This option requires modeling and careful consideration to determine how the progression on both Fell Street and Oak Street may be effected.

  Although the option would provide protected phasing for pedestrians and bicycles, the phase duration would be about one-third of the duration less than it currently is.

Transit

Option A

- There are two weekday evening express lines on Fell Street, the 16AX and the 16BX. On Masonic Avenue there is the 43 Masonic Avenue. Any changes to signal timing or capacity must take Muni operations into account.

Option B

- There are two weekday evening express lines on Fell Street, the 16AX and the 16BX. On Masonic Avenue there is the 43 Masonic Avenue. Any changes to signal timing or capacity must take Muni operations into account.

Option C

- There are two weekday evening express lines on Fell Street, the 16AX and the 16BX. On Masonic Avenue there is the 43 Masonic Avenue. Any changes to signal timing or capacity must take Muni operations into account.

Parking

Option A

- Parking utilization on Fell Street is extremely high. This option would result in the loss of approximately sixty lineal feet of parking, or the equivalent of about three vehicles.

Option B

- Parking utilization on Fell Street is extremely high. This option would result in the loss of approximately sixty lineal feet of parking, or the equivalent of about three vehicles.

Option C

- No Parking Loss

Trucks

Option A

- There are no changes to intersection geometry with this proposal, except for a setback limit line that would improve Fell Street to southbound Masonic Avenue turning movements.

Option B

- Modifications to turning geometry and lane widths must take into account left turning trucks from westbound Fell Street to Masonic Avenue southbound.

Option C

- Modifications to turning geometry and lane widths must take into account left turning trucks from westbound Fell Street to Masonic Avenue southbound.

Pedestrian Concerns

Option A

- Pedestrian safety would be improved with the use of a "head start" for path users. Pedestrians and bicyclists must exercise appropriate yield to one another when using the crosswalk. Motor vehicles are required to yield to pedestrians. Unique signage is required for signal controlled multi-use path crossings. This signage is identified in the San Francisco Bicycle Plan Update Supplemental Design Guideline.

Option B

- Pedestrian safety would be improved with the use of a "head start" for path users. Pedestrians and bicyclists must exercise appropriate yield to one another as well as to motor vehicles. Unique signage is required for signal controlled multi-use path crossings. This signage is identified in the San Francisco Bicycle Plan Update Supplemental Design Guideline.

Option C

- Pedestrian safety would be improved with a dedicated phase for path users. However, crossing time for path users in such a proposal significantly cuts the length of the crossing phase. Pedestrians and bicyclists must exercise appropriate yield to one another as well as to motor vehicles. Unique signage is required for signal controlled multi-use path crossings. This signage is identified in the San Francisco Bicycle Plan Update Supplemental Design Guideline.

Land Use

- Surrounding land use is park and high density residential, with high demand for on-street parking due to local shortage in off-street parking. Crossing improvement is a priority due to prevalence of the Panhandle Multi-Use Path as a commuter and recreational corridor for bicyclists, and popular pedestrian path.

Other Departments or Agencies

- All project alternatives require coordination with San Francisco Recreation and Park Department.

Preliminary Cost Estimate

- Option A: $8,000.
- Option B: $50,000.
- Option C: $100,000.

Next Steps

- To be determined.

1. View of existing crosswalk across Masonic (looking east). Crosswalk connects Penhandle multi-use path and serves numerous bicyclists and pedestriens.

2. Westbound bicyclist's view of Masonic crossing. Note that bicyclist's view of westbound vehicle traffic on Fell is obstructed by parked vehicles

3. Westbound driver's view of Masonic crossing. Motonsts view of Panhandle path users is often obstructed by perked vehicles.

4. Westbound vehicles turning left from Fell onto Masonic. Note sharp turn being made by vehicle. Also note that crosswelk stripe is offset from Fell by about 10 feet.

5. Westbound vehicles turning left from Fell onto Masonic. Due to congestion at the Masonic/Oak intersection, Masonic traffic backs up through the Masonic/Fell intersection.

6. Southbound Masonic vehicles do not clear the Fell intersection dunng the green light. Bicyclists end pedestnans must weave across encroached vehicles.

7. Motonsts waiting for vehicle queue to progress along southbound Masonic block westbound Fell traffic and impede the crosswalk.

8. Some northbound motorists stop within crosswalk during the red light instead of behind the crosswalk. This creates an unsafe condition for crosswalk users and limits sight distance.

Fell Street/Masonic Avenue Intersection

Existing Conditions

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THIS IS A REPRESENTATIVE DIAGRAM AND IS NOT BASED ON ACTUAL SURVEY DATA.
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FELL MASONIC INTERSECTION EXISTING CONDITIONS SHEET 1 OF 1
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

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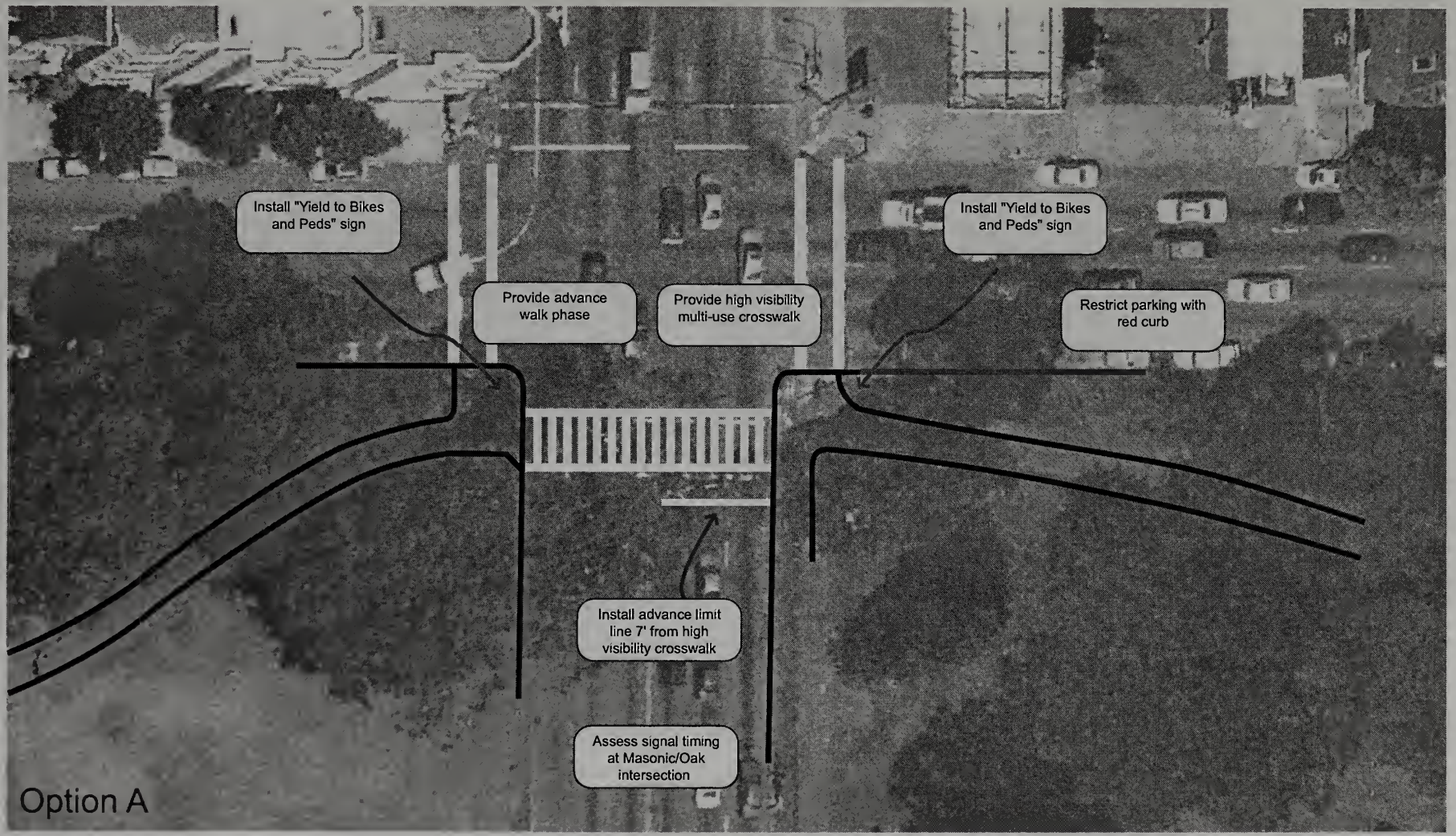
SF BIKE PLAN UPDATE

SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

Fell Street/Masonic Avenue Intersection

Design Concept


Install "Yield to Bikes and Peds" sign
Provide advance walk phase
Provide high visibility multi-use crosswalk
Install "Yield to Bikes and Peds" sign
Restrict parking with red curb
Install advance limit line 7' from high visibility crosswalk
Assess signal timing at Masonic/Oak intersection
Option A

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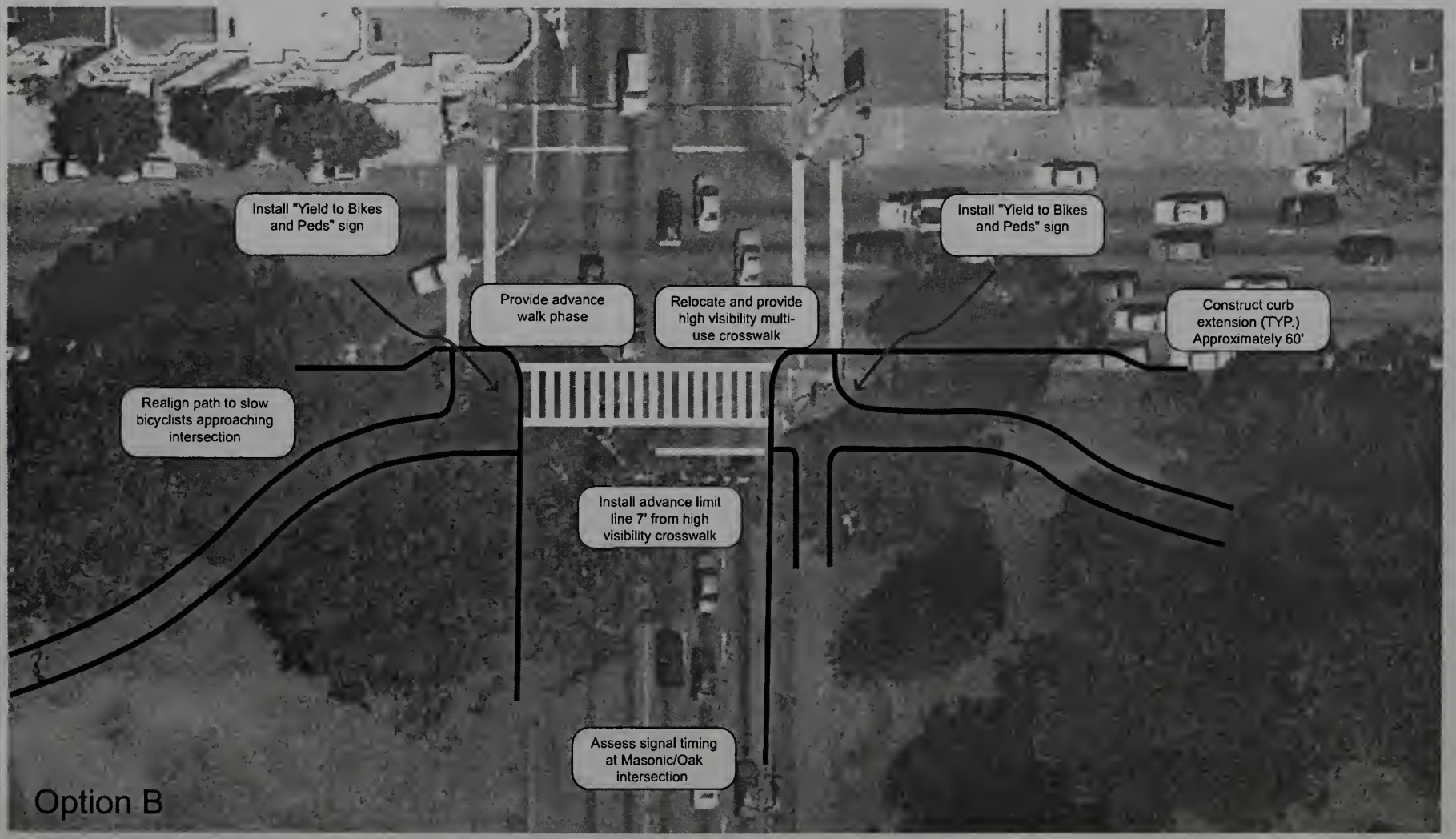
FELL MASONIC DESIGN CONCEPT SHEET 1 OF 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

Fell Street/Masonic Avenue Intersection

Design Concept


Install "Yield to Bikes and Peds" sign
Provide advance walk phase
Relocate and provide high visibility multi-use crosswalk
Install "Yield to Bikes and Peds" sign
Construct curb extension (TYP.) Approximately 60'
Realign path to slow bicyclists approaching intersection
Install advance limit line 7' from high visibility crosswalk
Assess signal timing at Masonic/Oak intersection
Option B

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FELL MASONIC DESIGN CONCEPT SHEET 2 OF 3
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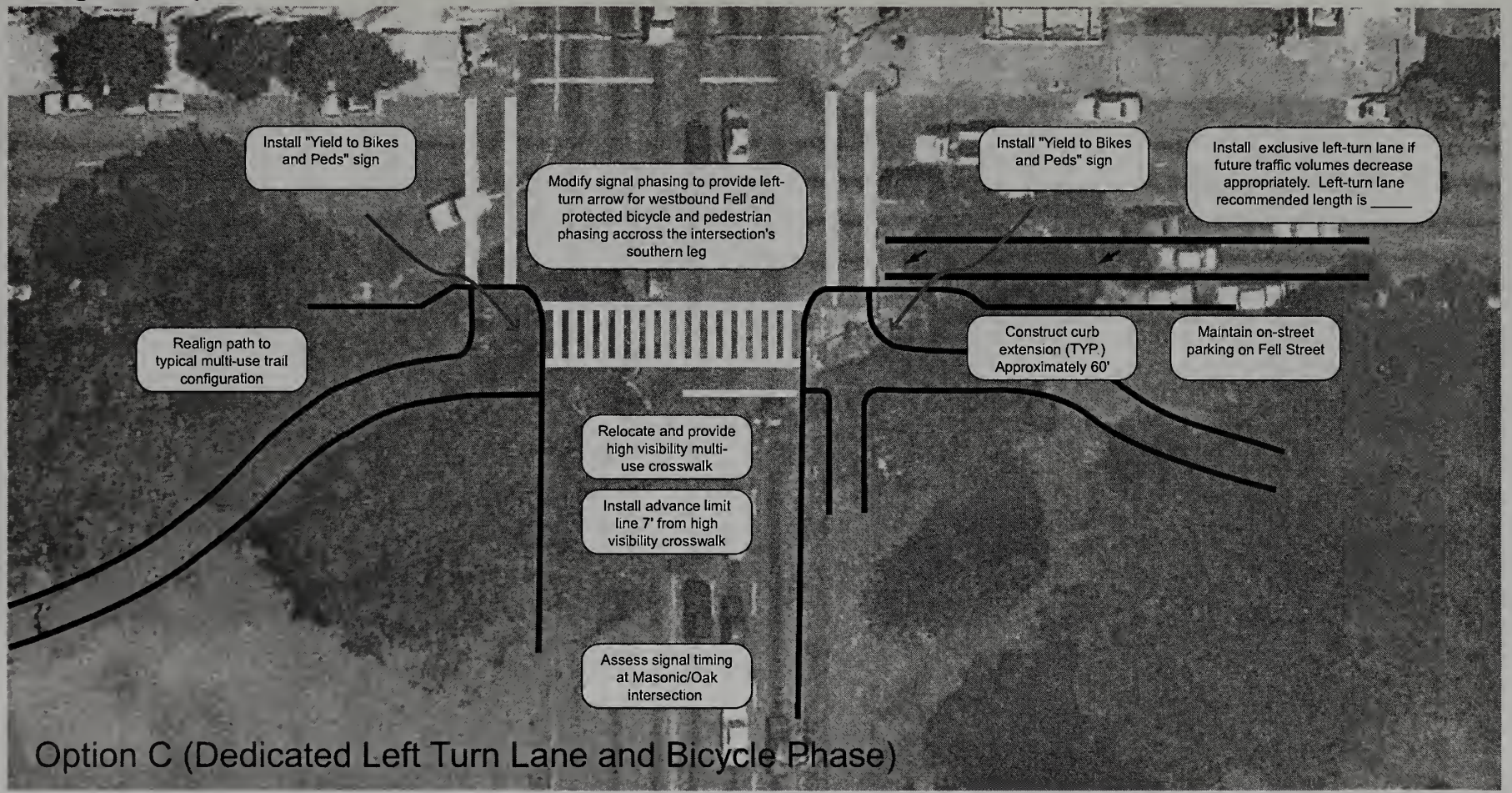
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

Fell Street/Masonic Avenue Intersection

Design Concept


Install "Yield to Bikes and Peds" sign
Modify signal phasing to provide left-turn arrow for westbound Fell and protected bicycle and pedestrian phasing accross the intersection's southern leg
Install "Yield to Bikes and Peds" sign
Install exclusive left-turn lane if future traffic volumes decrease appropriately. Left-turn lane recommended length is _____
Realign path to typical multi-use trail configuration
Construct curb extension (TYP.) Approximately 60'
Maintain on-street parking on Fell Street
Relocate and provide high visibility multi-use crosswalk
Install advance limit line 7' from high visibility crosswalk
Assess signal timing at Masonic/Oak intersection

Option C (Dedicated Left Turn Lane and Bicycle Phase)

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FELL MASONIC DESIGN CONCEPT SHEET 3 OF 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

ILLINOIS STREET

SUMMARY SHEET OUTLINE

General Project Description

Illinois Street is a low-volume street with a variety of truck and private vehicle traffic serving primarily industrial land uses. In general, Illinois Street provides one travel lane in each direction, with a mix of on-street parking including both parallel and perpendicular. The parking/sidewalk configuration along the street varies, resulting in a complex project with several design segments. Numerous loading docks and arcades, and the existing freight rail line and future Muni turnaround in the center of the street, are addressed in the proposed design(s). Illinois Street is identified as a preferred bicycle improvement corridor by a variety of City and regional agencies based on its relationship to other local projects including Third Street Light Rail, Mission Bay, and the Central Waterfront Better Neighborhood Plan.

History/Background

- Third Street was the original north-south bike route in the area with three travel lanes in each direction. With the loss of street width and lanes to the Third Street Light Rail project, Illinois Street has been identified as the replacement route.
- The Central Waterfront Neighborhood Plan identifies bicycle and pedestrian circulation throughout the plan area as priorities and specifically addresses the need for continuous sidewalks, a north-south bicycle route on Illinois Street, and marking of the SF Bay Trail.
- The Central Waterfront Neighborhood specifies that bike lane striping should be dropped at perpendicular parking and loading docks. Additional research is being conducted on appropriate design solutions for this situation.
- ABAG Bay Trail Plan identified portions of Illinois Street as a proposed on-street segment of the Bay Trail.
- During Third Street Light Rail construction, Illinois Street from 16th to Marin Streets is being used as a detour route.
- Illinois Street will become a primary truck route upon completion of the Illinois Street bridge and Third Street light rail projects.
- Illinois Street is the primary route for industrial access and serves as the "collector" street for industrial/commercial traffic for southeast section of San Francisco.

Design Segments

Section A: 16th Street to Mariposa Street (See Concept Diagram)

- 16th to Mariposa Streets, both directions: Retain parallel parking and stripe a 5' bike lane and 12' travel lane in both directions.

Section B: Mariposa Street to 18th Street (See Concept Diagram)

Option 1 (Angle Parking)

- Mariposa to 18th Streets, southbound: Elimination of southbound tow-away lane allows for an 8' parking lane, 5' bike lane, and 12' travel lane.

- Mariposa to 18th Streets, northbound: Conversion of existing head-in parking to back-in 60-degree angled parking allows for an 18' parking lane, 5' bike lane, and 12' travel lane. Two existing northbound lanes, a dedicated right-turn lane onto Terry Francois Boulevard and right-turn/through lane, require that the bike lane is dropped unless one of the northbound lanes is removed.

Option 2 (Expand Sidewalk, Parallel Parking)

- Mariposa to 18th Streets, southbound: Elimination of southbound tow-away lane allows for an 8' parking lane, 5' bike lane, and 12' travel lane.
- Mariposa to 18th Streets, northbound: Expanding the sidewalk to 15' requires that the current head-in parking being converted to parallel parking. A 5' bike lane and 12' travel lane would then be striped. Two existing northbound lanes, a dedicated right-turn lane onto Terry Francois Boulevard and right-turn/through lane, require that the bike lane is dropped unless one of the northbound lanes is removed.

Section C: 18th Street to 19th Street (See Concept Diagram)

Option 1 (Prior to 3rd Street Light Rail Turnaround)

- 18th to 19th Streets, both directions: Elimination of southbound tow-away lane allows for an 8' parking lane, 5' bike lane, and 12' travel lane in both directions.

Option 2 (With 3rd Street Light Rail Turnaround)

- 18th to 19th Streets, both directions: DPT, Muni, and the Port should communicate throughout the development and construction of the 3rd Street Light Rail turnaround. Currently the proposal is to have a 14' wide curb lane and 11' light rail lane in the southbound direction, 8' raised platform, and 14' shared lane alongside an 8' parking lane in the northbound direction.

Section D: 19th Street to 20th Street (See Concept Diagram)

Option 1 (Angled Parking on Eastside, No Parking on Westside)

- 19th to 20th Streets, southbound: Elimination of southbound tow away lane allows for a 6' curbside bike lane and 12' travel lane.
- 19th to 20th Streets, northbound: Constructing an 11' sidewalk and converting the existing head-in parking to back-in angled parking allows for a 6' bike lane and 12' travel lane. No sidewalk currently exists here and there is a drop-off beyond the existing fence.

Option 2 (Parallel Parking on both sides)

- 19th to 20th Streets, southbound: Elimination of southbound tow away lane allows for an 8' parking lane, 5' bike lane, and 12' travel lane.
- 19th to 20th Streets, northbound: Constructing a 15' sidewalk and converting the existing head-in parking to parallel allows for a 5' bike lane and 12' travel lane. No sidewalk currently exists here and there is a drop-off beyond the existing fence.

Section E: 20th Street to 22nd Street (See Concept Diagram)

Option 1 (Narrowed Sidewalk)

- 20th to 22nd Streets, southbound: Existing roadway is not striped and has loading bay and arcades immediately adjacent curb line, allowing for development of 6' curbside bike lane (with appropriate signage, and pending Port/Planning/DPT agreement) and 12' travel lane.
- 20th to 22nd Streets, northbound: Existing roadway is not striped and has existing power poles in right of way (requires confirmation of exact location) and unlegislated head-in parking. Relocating poles and narrowing sidewalk to 11' sidewalk allows for 18' back-in angled parking, 6' bike lane, and 12' travel lane.
- Appropriate treatments for potential bike route/loading dock conflict should be developed for the segments adjacent active loading docks.

Option 2 (No Sidewalk Change)

- 20th to 22nd Streets, southbound: Existing roadway is not striped and has loading bay and arcades immediately adjacent curb line, allowing for development of 5' curbside bike lane (with appropriate signage, and pending Port/Planning/DPT agreement) and 12' travel lane.
- 20th to 22nd Streets, northbound: Existing roadway is not striped and unlegislated head-in parking, allowing for creation of 16' 45-degree angled parking lane, 5' bike lane, and 12' travel lane.
- Appropriate treatments for potential bike route/loading dock conflict should be developed for the segments adjacent active loading docks.

Section F: 22nd Street to 25th Street (See Concept Diagram)

- 22nd to 25th Streets, both directions: Retain parallel parking and stripe a 5' bike lane and 12' travel lane in both directions.
- Appropriate treatments for potential bike route/loading dock conflict should be developed for the segments adjacent active loading docks.

Section G: 25th Street to Marin Street (See Concept Diagram)

- 25th to Marin Streets, both directions: Construct 10' wide sidewalks (to be developed by Port) and stripe 8' parking lane, 5' bike lane and 11' travel lane in both directions with center 12' turn lane/rail track.
- Appropriate treatments for potential bike route/loading dock conflict should be developed for the segments adjacent active loading docks.

Section H: Marin Street to Islais Creek Bridge (See Concept Diagram)

- Marin Street to Islais Creek Bridge, both directions: Construction of 10' wide sidewalks (to be developed by Port) and striping of an 8'parking lane, 5' bike lane, and 11' travel lane in both directions with a center striped transition lane.

Section I: Islais Creek Bridge (See Concept Diagram)

- Islais Creek Bridge: To be constructed to provide a northbound curb-separated 4' northbound bicycle path, 2 11' travel lanes overlapping a center rail track, and a grade-separated 8' multi-use path for two-way pedestrian traffic and southbound bicycle traffic.

Capacity

- While the project would not remove any full time vehicular through travel lanes along Illinois Street, there are proposed changes to the intersection of Illinois Street/Mariposa Street/Terry Francois Boulevard: remove the southbound tow-away lane that is in effect for Giants games and remove a northbound right-turn lane leading to Terry Francois Boulevard. Initial traffic analysis using a post-ball game count shows that these changes would yield an intersection Level of Service D, with a Level of Service E for motorists turning left from Terry Francois Boulevard to Illinois Street. It should be noted that post event traffic is generally expected by spectators, and that the trade-off is for increased parking and a full time bike lane in the southbound direction.

Transit

- Muni Route 48 traverses Illinois Street between 20th and 22nd Streets. The project will not impact this route.
- Preliminary plans for the 3rd Street Light Rail turnaround turning east on 18th Street, south on Illinois Street, and west on 19th Street back to 3rd Street have been approved by the MTA Board to allow changing the sidewalk to accommodate the following cross-section from west to east: 10 ft sidewalk, 14' travel lane, 11' LRV lane, possible 8' platform, 14' travel lane, 8' parking (there is also a 15' dedicated sidewalk on the east side). Coordination between the Bike Plan Update team and the Muni turnaround project team needs to take place as both plans develop.

Parking

Generally:

- Parking is permitted on both sides of Illinois Street, except where loading docks occur. Parallel on-street parking is prevalent throughout the corridor, except on the east side between 19th and 22nd, where 90-degree parking is provided. There is space for about 150 vehicles to park in this area.
- On-street parking is not allowed on the west side of Illinois Street between Mariposa and 20th Street during Giants home games. During these periods, the parking lane is used as a secondary southbound travel lane. Removal of tow-away yields more full time spaces.

Option A:

- Suggests narrowed sidewalks and back-in angled parking, yielding more spaces than Option B but costing significantly more.
- The project would convert head-in 90-degree parking spaces into back-in 60-degree spaces on the east side of Illinois Street between 19th and 22nd Streets. This conversion would result in the decrease of about 30 parking spaces. The existing 15-foot wide sidewalk would be narrowed to accommodate this change.
- As rear vehicle overhang of the sidewalk associated with back-in angle parking create specific design considerations in some locations, site specific study should take into account: roadway crown, poles/street furniture on sidewalks close to curb face, drainage, curb height, etc.
- Analysis of number of parking spaces lost and potential mitigation to be completed.

Option B:

- Suggest widening or not narrowing sidewalks and parallel parking, yielding fewer spaces than Option A along Illinois Street.
- Analysis of number of parking spaces lost and potential mitigation to be completed.

Trucks

- Illinois Street is a route used by trucks serving immediately adjacent land uses and will become a primary truck route upon completion of the Illinois Street Bridge.

Pedestrian Concerns

- The project may reduce Illinois Street's east sidewalk between 19th and 22nd Streets from 15 feet to 11 feet wide. Due to anticipated continued low to moderate pedestrian volumes in the area, pedestrians would not be impacted by this change. It should be noted, however, that the east sidewalk is likely to be the location of the Bay Trail.
- No sidewalk currently exists on portions of Illinois between 19th and 20th Streets, and between 20th and 22nd Streets there are various sidewalk widths. Not all details are reflected in Concept Design sheets and sections.
- Existing loading docks result in frequent use of pedestrian realm and parking lane by large trucks for loading and unloading. Development of a policy by the Port, DPT, and Planning regarding sidewalks and bike lanes adjacent loading docks is needed.

Land Use

- Outreach must occur to determine if bike lanes and loading docks can be compatible with industrial users and building owners.
- Existing freight rail located in center of roadway and currently not used will not conflict with location of proposed bike lanes adjacent existing parking
- A parking analysis should be undertaken to identify future development scenarios and land use impact, based on Planning Department input.

Other Departments or Agencies

- Port of San Francisco: agreement needed on (1) back-in angled parking configuration, (2) bike lane striping at loading bays and arcades, and (3) new or improved sidewalks.
- Planning Department: agreement needed on location of bike lanes and compatibility with the goals of the Better Neighborhood Central Waterfront Plan.
- Association of Bay Area Governments: agreement needed on design for compliance with Bay Trail recommended design guidelines
- Muni: communicate regarding light rail turnaround and Metro East facility development.

Next Steps

- Potential mitigation for parking loss should be studied.
- Continued coordination with the Port, the Planning Department and the Association of Bay Area Governments is required.
- Begin outreach to industrial operators and owners.

1. Looking northerly along Illinois to the north of Mariposa. This section of Illinois is 50 feet wide and includes parallel parking on both sides, as well as railroad tracks along both traffic lanes.

2. View of the Terry Francois Blvd./Illinois intersection, looking northeasterly towards Terry Francois. Two right-turn lanes feed Terry Francois from northbound Illinois. Terry Francois includes Class II bicycle lanes.

3. Looking northerly toward the Mariposa intersection. Note that parking on the east side again changes. Also note the railroad track alignment.

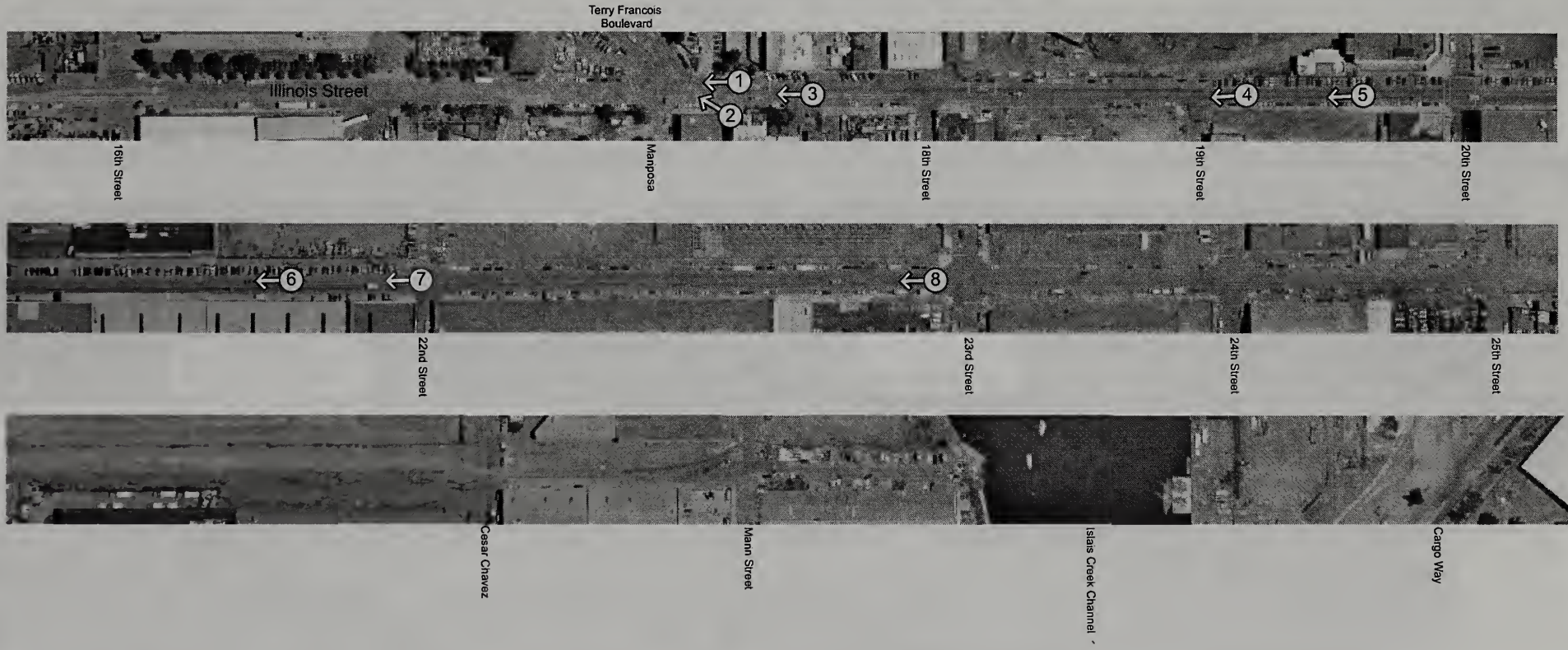
4. Between 19th and 18th, perking on Illinois' east side changes to parallel parking (beyond the pick-up truck).

5. Between 20th and 19th, Illinois' 50-foot cross-section includes parallel parking on the west side, two southbound traffic lanes, one northbound traffic lanes, and perpendicular parking on the east side.

6. View of Illinois between 22nd and 20th. Here perpendicular parking is provided on the east side of the roadway and loading docks are on the west side. The roadwey is 50 feet wide.

7. The rear-ends of parked vehicles extend in the west side of the roadway north of 22nd.

8. Looking northerly along Illinois just to the north of 23rd. Between 24th and 22nd, Illinois is 50 feet wide, provides parallel parking along both sides, and has a railroad track along the west lane.



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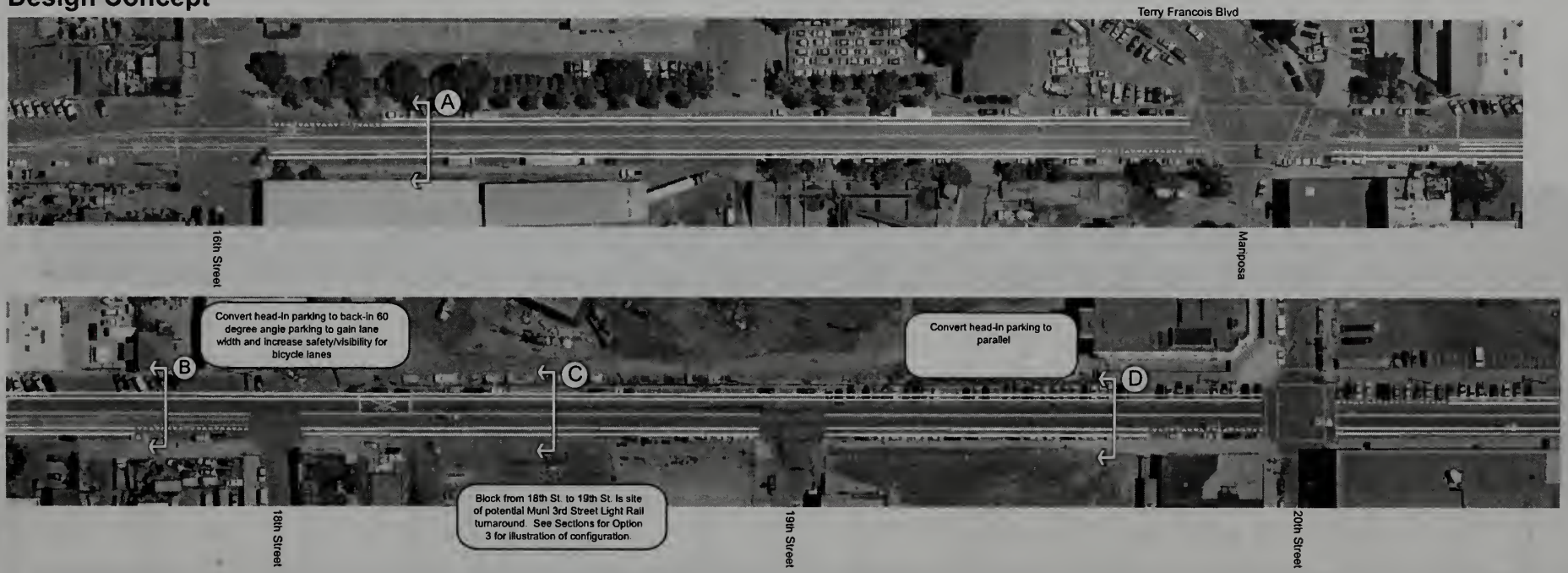
ILLINOIS STREET EXISTING CONDITIONS SHEET 1 OF 1
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

BIKE PLAN UPDATE

Illinois Street

Design Concept


Terry Francois Blvd
A
16th Street
Mariposa
Convert head-in parking to back-in 60 degree angle parking to gain lane width and increase safety/visibility for bicycle lanes
B
C
Convert head-in parking to parallel
D
Block from 18th St. to 19th St. is site of potential Muni 3rd Street Light Rail turnaround. See Sections for Option 3 for illustration of configuration.
18th Street
19th Street
20th Street

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ILLINOIS STREET DESIGN CONCEPT SHEET 1 OF 6
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

Illinois Street
Design Concept

Sections

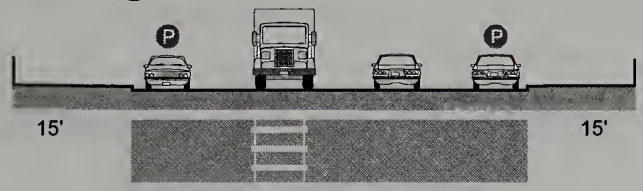
ROW width 80'
Existing 50' Curb to Curb

ROW width 80'
Existing 60' Curb to Curb

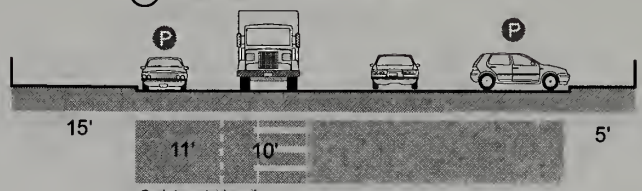
ROW width 80'
Existing 50' Curb to Curb

Existing

Ⓐ 16th Street to Mariposa Street

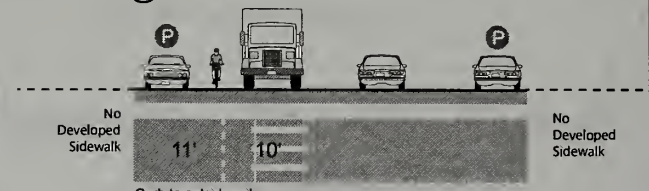


Ⓑ Mariposa Street to 18th Street



NOTE: Existing parking is tow-away for Giants games.

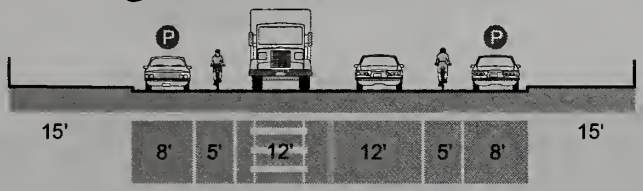
Ⓒ 18th Street to 19th Street



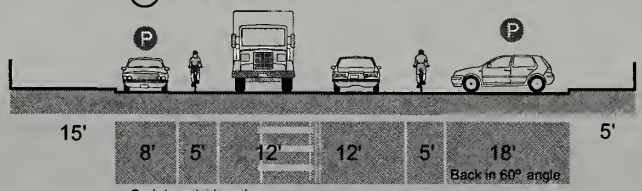
NOTE: Existing parking is tow-away for Giants games.

Option 1

Ⓐ 16th Street to Mariposa Street

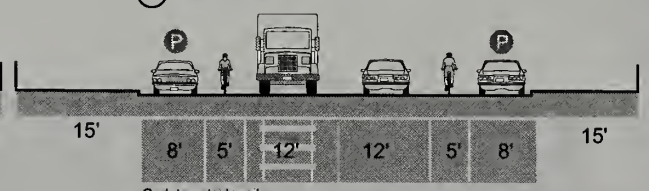


Ⓑ Mariposa Street to 18th Street



NOTE: Requires removal of parking restrictions and removal of second southbound lane.

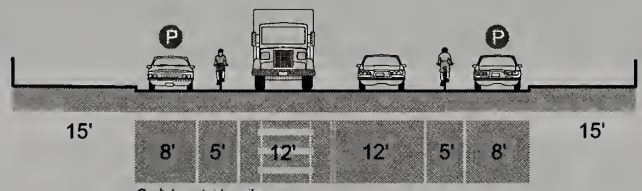
Ⓒ 18th Street to 19th Street



NOTE: Requires removal of parking restrictions and removal of second southbound lane.

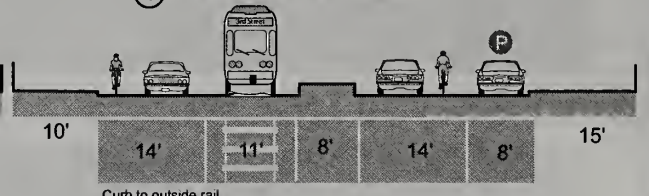
Option 2

Ⓑ Mariposa to 18th



NOTE: Requires removal of southbound parking restrictions, removal of second southbound lane and extension of east sidewalk to eliminate existing parking bay.

Ⓒ 18th Street to 19th Street



NOTE: Coordination between the Bike Plan Update and the proposed Muni turnaround project needs to take place as both plans develop (track alignment unknown).

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ILLINOIS STREET DESIGN CONCEPT SHEET 2 OF 6
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SF BIKE PLAN UPDATE

Illinois Street
Design Concept

Convert head-in parking to back-in 60 degree angle parking to gain lane width and increase safety/visibility for bicycle lanes
E
22nd St
F
23rd Street
24th Street
25th Street

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ILLINOIS STREET DESIGN CONCEPT SHEET 3 OF 6
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

BIKE PLAN UPDATE

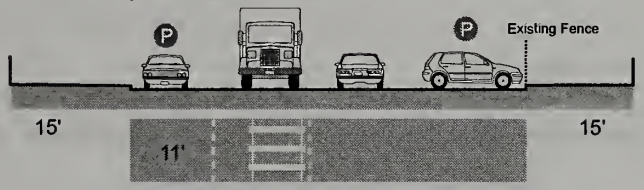
Illinois Street
Design Concept

Sections

ROW width 80'
Existing 50' Curb to Curb

Existing

D 19th Street to 20th Street

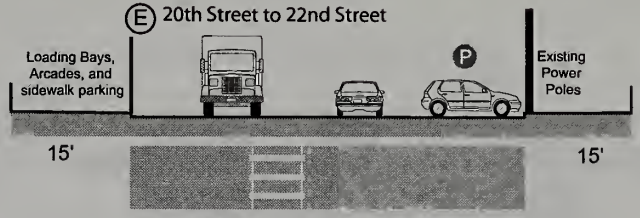


Curb to outside rail
16' (Typ.)

NOTE: Existing parking on west side of Illinois Street is tow-away for Giants games. Second southbound travel lane becomes right turn lane at 20th.

ROW width 80'
Existing 50' Curb to Curb

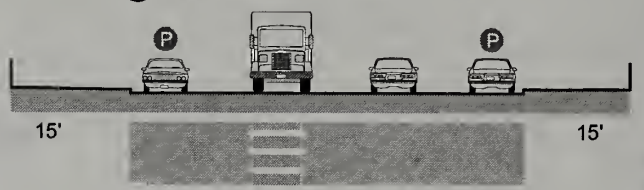
E 20th Street to 22nd Street



Curb to outside rail
16' (Typ.)

ROW width 80'
Existing 50' Curb to Curb

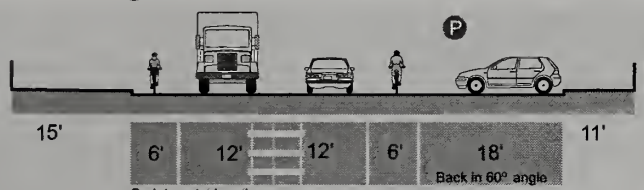
F 22nd Street to 25th Street



Curb to outside rail
16' (Typ.)

Option 1

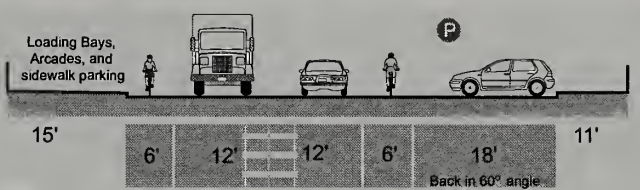
D 19th Street to 20th Street



Curb to outside rail
16' (Typ.)

NOTE: Requires removal of parking on west side of Illinois Street. Requires removal of second southbound travel lane. Requires narrowing east sidewalk.

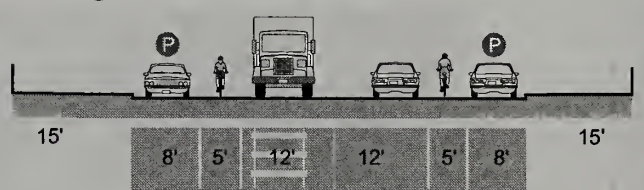
E 20th Street to 22nd Street



Curb to outside rail
16' (Typ.)

NOTE: Requires power pole relocation/undergrounding and construction of drainage improvements.

F 22nd Street to 25th Street



Curb to outside rail
16' (Typ.)

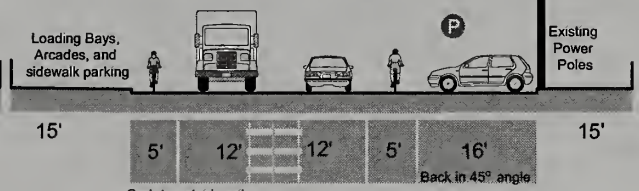
Option 2

D 19th Street to 20th Street

Curb to outside rail
16' (Typ.)

NOTE: Requires reorientation of existing head in parking to parallel parallel parking, resulting in overall parking loss. Requires removal of second southbound travel lane.

E 20th Street to 22nd Street



Curb to outside rail
16' (Typ.)

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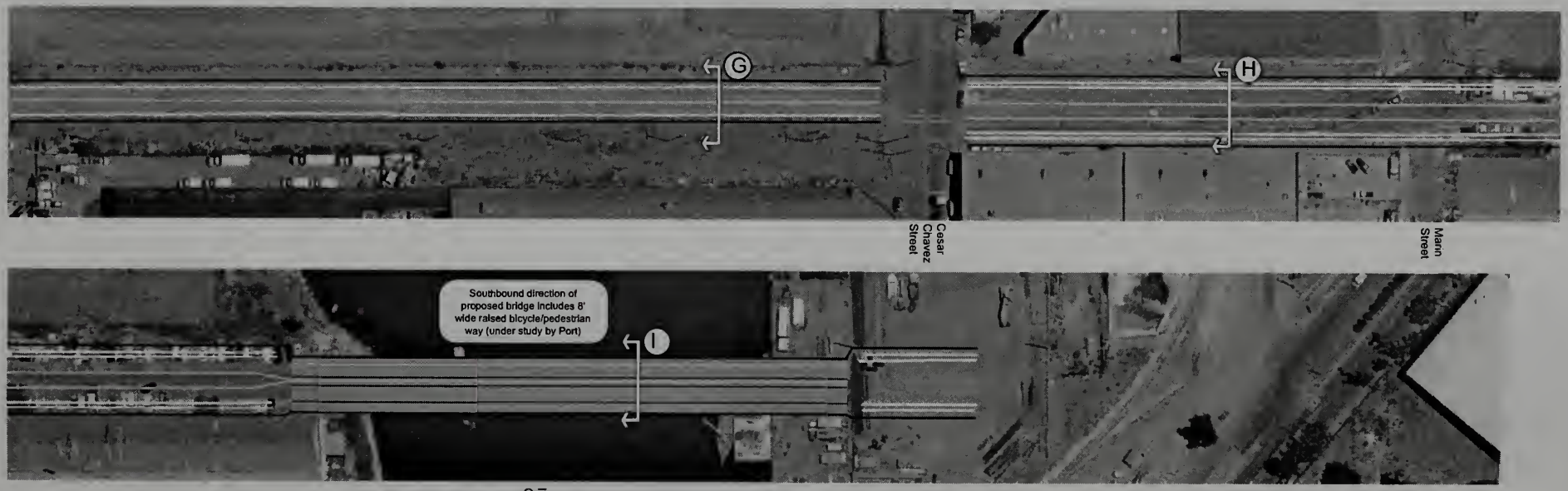
ILLINOIS STREET DESIGN CONCEPT SHEET 4 OF 6
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

BIKE PLAN UPDATE

Illinois Street

Design Concept



Southbound direction of proposed bridge includes 8' wide raised bicycle/pedestrian way (under study by Port)
I
Islais Creek Channel
Cargo Way

Three design options for the proposed bridge are currently under consideration. Details are subject to change.

Sections

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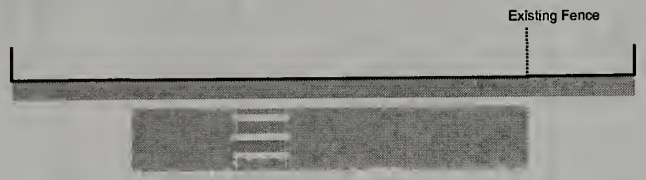
Illinois Street
Design Concept

Sections

ROW width 80'

Ⓖ 25th Street to Cesar Chavez

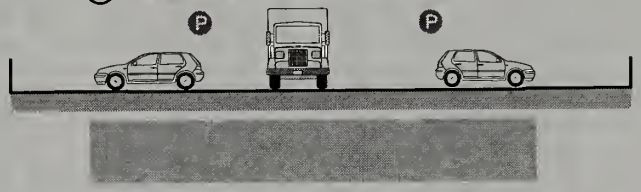
Existing



NOTE: Existing condition is undeveloped graded roadway with existing rail track.

ROW width 80'

Ⓗ Marin Street to Islais Creek Bridge



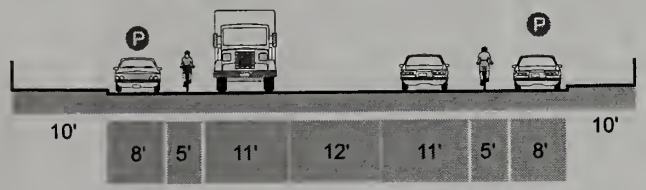
NOTE: Existing condition is partially developed roadway with existing vehicle parking and storage.

ROW TBD

Ⓘ No Existing Bridge

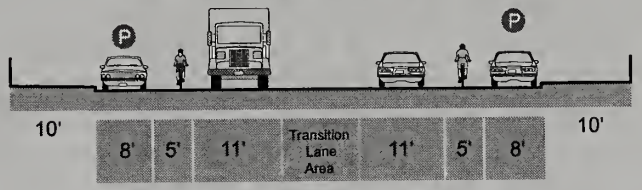
Option 1

Ⓖ 25th Street to Cesar Chavez



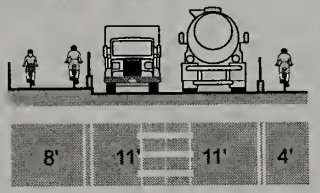
NOTE: Two 10' sidewalks to be considered by Port with 15' wide bulb outs on some corners (subject to change).

Ⓗ Marin Street to Islais Creek Bridge



NOTE: Two 10' sidewalks w/ 15' bulb outs to be considered by Port

Ⓘ Bridge Section



NOTE: Rail in center. Eight-foot wide, separated multi-use pathway is intended for pedestrians and southbound bicyclists. Four-foot path is intended for northbound bicyclists."

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ILLINOIS STREET DESIGN CONCEPT SHEET 6 OF 6
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SF BIKE PLAN UPDATE

SUMMARY SHEET

LAGUNA HONDA BOULEVARD, PLAZA STREET TO WOODSIDE AVENUE

Project Description
Laguna Honda Boulevard is a medium-volume roadway in the central portion of San Francisco that provides access between the Inner Sunset and Twin Peaks/West Portal neighborhoods. This section of Laguna Honda Boulevard also provides access to Laguna Honda Hospital. Laguna Honda Boulevard has striped bike lanes between Lawton Street and Plaza Street, north of the Muni Metro Forest Hill Station. Bicycle improvements to this section would benefit bicyclists by extending the striped bike lanes and improving the crossing at the Laguna Honda/Dewey Boulevards intersection. Speed limit along this section of Laguna Honda Boulevard is 35 mph.

History/Background
Bike lanes were striped on Laguna Honda Boulevard north of Clarendon Avenue and on Dewey Boulevard in 1996. In 1999, the bike lanes on Laguna Honda Boulevard were extended south of Clarendon Avenue. As described below under Design Segments, filling this gap by adding bike lanes on Laguna Honda Boulevard south of the existing bike lanes and north of Dewey Boulevard is complex. In 2002, DPT Bicycle Program staff applied for and received $160,000 in STIP funds to do detailed design (but not construction) work to add these bike lanes and to design the rehabilitation of the O'Shaughnessy Bicycle Path. Due to staffing constraints, this design work has not begun. Bicycle Program staff informed the Laguna Honda Hospital Replacement Project Manager about this bike lane project, since it could require shifting the sidewalk toward the hospital property. As part of the hospital replacement project, consideration is being given to adding bicycle and pedestrian trails on the hospital property. However, these trails are currently unfunded and would not be an adequate substitute for extending the Laguna Honda Boulevard bike lanes.

Design Segments

- *Southbound*: For both options, the bike lane will be extended from just north of Plaza Street to the Muni Forest Hill Station. The bike lane will then be dashed across the southbound exit area from the transit bus pullout at the Forest Hill Station, and continue south to the intersection with Dewey Boulevard. Option 1 requires narrowing the median to two feet, and elimination of the dedicated left-turn lane entry to Laguna Honda Hospital. This allows for the creation of two vehicle left-turn lanes, a bike left-turn lane, a vehicle through lane serving Dewey Boulevard, and a bike lane serving Dewey Boulevard. Conversion of the center through/left-turn lane to left-turn only would simplify turning movements at this intersection and allow bicyclists to proceed more safely through the intersection to continue along southbound Laguna Honda Boulevard. Striping of the southbound bicycle lane continuously from the Forest Hill Station to Dewey Boulevard requires balancing of traffic lane widths on north and southbound Laguna Honda Boulevard, minimum allowable median width, and allowable sidewalk narrowing on northbound Laguna Honda Boulevard (See "Northbound" discussion below). Use of a colored bike lane may be appropriate in areas where cyclists have the right of way in conflict areas. Option 2 assumes no additional roadway width can be obtained. In this case, there is room for either a through bike lane along the curb or a left turn bike lane. "Sharrows" or a "ghost bike lane" could be used to

accommodate the movement that does not receive a bike lane. However, there may be other means of obtaining additional roadway width, such as relocating the sidewalk along the Forest Hill Muni Station. A utility outcropping near the intersection with Dewey Boulevard creates a bottleneck, however.

- *Northbound*: For Option 1, a northbound bike lane would be striped on Laguna Honda Boulevard north of the intersection with Dewey Boulevard. This requires narrowing of the existing two northbound traffic lanes from 14' outside and 12' inside to 13' outside and 12' inside. These lane widths should be maintained due to the roadway curve geometry. Under this scenario, the existing sidewalk requires narrowing from 9' to 7' to create sufficient width for a 5' bike lane. There are utility poles on the sidewalk approximately 6" from the existing curb. Any sidewalk narrowing will require relocation of these utility poles. The eastern edge of the existing sidewalk is formed by an existing concrete retaining wall. Any plans to maintain the existing sidewalk width by widening it to the east will require reconstruction of this retaining wall and coordination with the Laguna Honda Hospital Replacement project. Special signage and/or striping should be considered at the northbound bus pullout/traffic turnaround to inform motorists and transit operators to expect bicycles passing the entry and exit for this pullout. Continuing north from the northern exit of the transit pullout, shifting the existing sidewalk 6 feet east would be required to widen the roadway. This additional roadway width would accommodate the bicycle lane.

Capacity

- Capacity may be affected since the existing third southbound travel lane adjacent to the transit bus pullout at Forest Hill Station will be removed to provide a bike lane. The third travel lane would be retained between the Muni Station and the Laguna Honda/Dewey Boulevards intersection.
- Capacity at the Laguna Honda/Dewey Boulevards intersection would be affected by the proposed lane configuration change in Option 1. Due to the high volume of vehicles turning left, the addition of a second dedicated left turn lane is not anticipated to have a negative impact on capacity and will likely clarify and improve operations.

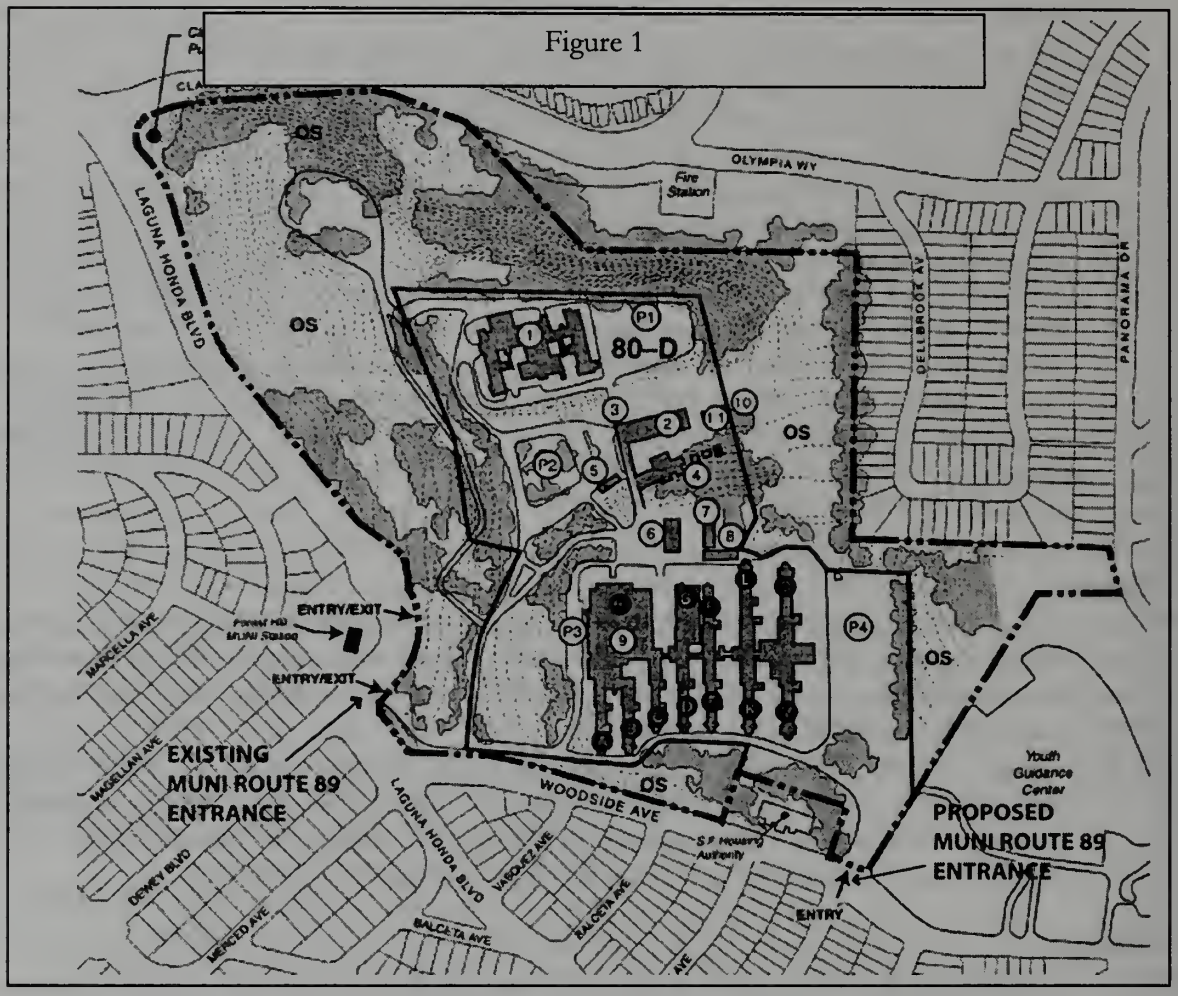
Parking

- Parking on the southbound segment of Laguna Honda Boulevard between Dewey Boulevard and Woodside Avenue would be removed to provide for greater transition room for bicyclists. Three parking spaces would be removed.

Transit

- Muni lines 36, 43, 44, 52, and 89 use Laguna Honda Boulevard. Traffic analysis must be conducted for potential impacts to these lines that would be created by changed lane configurations and implementation of the proposed bicycle lanes.
- Option 1, elimination of the left-turn pocket entrance to Laguna Honda Hospital, would impact Muni line 89. Current volumes at this left-turn pocket entrance are ten vehicles per hour, with four of the ten vehicles being Muni buses. One possible option for Muni line 89 is to enter Laguna Honda Hospital from Woodside Avenue, as shown in Figure 1 below. The alternative entrance at the signalized intersection of Woodside Avenue and Idora Avenue requires additional analysis and design concepts. Currently, left-turn movements are restricted from Laguna Honda Boulevard. In order to provide for Muni access at the entrance, this left turn restriction would have to be eliminated for transit

vehicles and a left-turn pocket created. This would require minor modification to an existing pedestrian refuge island. The existing two way entry/exit width is 34'-6". To exit Laguna Honda Hospital, Muni would use the same exit onto Laguna Honda Boulevard as it does today.



Pedestrian Concerns

- Given the amount of sidewalk and median relocation/narrowing proposed, pedestrian accommodation must be considered throughout the design process. Pedestrian presence is moderate/high in this area.

Land Use

- Land use is a mix of residential, commercial, and open space, with large attractors such as the Forest Hill Station and Laguna Honda Hospital in the project area.

Other Departments or Agencies

- Agencies to keep involved in the process include Muni, the Department of Health/Laguna Honda Hospital Replacement team, and the Department of Real Estate. The Department of Public Works will also be directly involved with the design process.

Next Steps

- Capacity analysis at the Laguna Honda/Dewey Boulevards intersection
- Analysis of proposed Muni line 89 modification and rerouting to Woodside/Idora Avenues signalized intersection
- Property ownership boundaries adjacent to the east sidewalk should be identified.
- Coordination with the Department of Public Works to begin the process of creating Plans, Specifications, and Estimates (PS&Es).
- Coordination with City of San Francisco Department of Real Estate and City of San Francisco Department of Health regarding potential sidewalk expansion (in lieu of narrowing) to provide adequate width for northbound bike lane.

1. Laguna Honde near Clerendon, facing north. Bike lanes exist on Laguna Honde batwean Lawton (in tha north) to a faw hundred faet south of Clasendon.

2. Laguna Honda, north of the Muni Station, looking north. If the sidewalk or roedwey is widened, utility poles will need to be moved.

3. Laguna Honda, north of the Muni Station, looking northwest. The bike lane could ba extanded in this section, since parking is prohibitad.

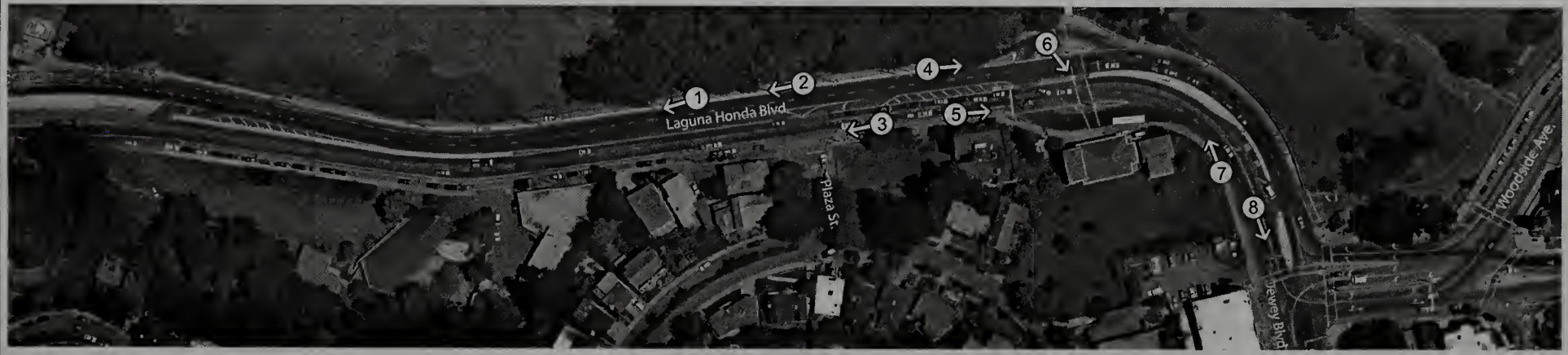
4. Leguna Honda at the Muni Forest Hill Station, looking at the northbound lanes. The buss pullout and turnaround creates a conflict point for cyclists.

5. Laguna Honda approaching tha Muni Forest Hill Station. Both motorists and busas access the station, thus creating conflicts for both cyclists and padestnans.

6. Laguna Honda at Muni Station, looking northwast. Hare, there is a signalizad crossing, but pedestnans often cross without waiting for the signal.

7. Laguna Honda, south of Muni Stetion. There are no bike lanes ion this section of Laguna Honda.

8. Laguna Honde at intersection with Dewey, facing south. Cyclists wishing to travel aast to Woodside encounter a difficult intersection crossing hare.



SF BIKE PLAN UPDATE

Laguna Honda Blvd.

Plaza St. to Woodside Ave.

This draft diagram is designed for public input and discussion purposes.
This is a representative diagram and is not based on actual survey data.
All information presented in this diagram is subject to modification.

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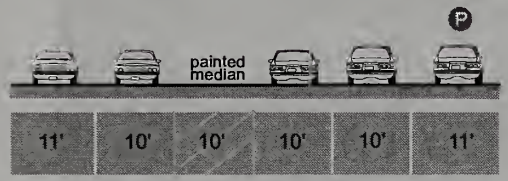
Laguna Honda, Plaza to Woodside Existing Conditions Sheet 1 of 1
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

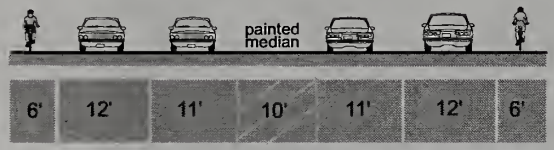
Street Cross-Sections (looking east to Woodside Ave.)

Ⓐ Plaza Street to MUNI Station

Existing



Option 1



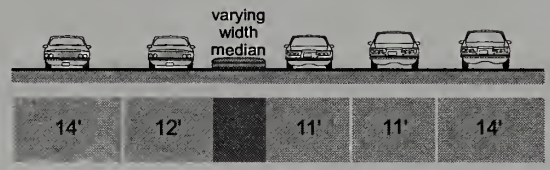
NOTE: Sidewalk narrowing and/or roadway widening on northbound Laguna Honda is required to accomodate bike lanes in both directions on this segment.

Option 2

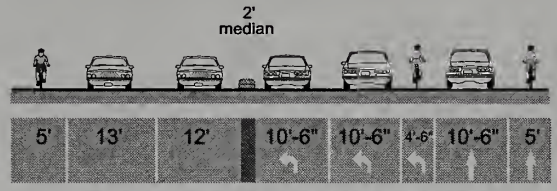
No change

Ⓑ MUNI Station to Dewey/Woodside Avenue

Existing

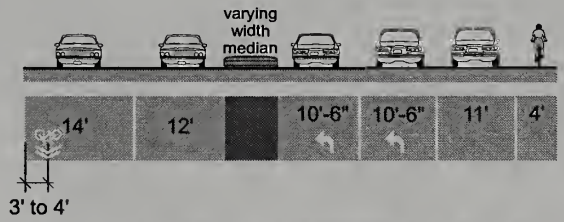


Option 1



NOTE: Road widening of Laguna Honda Boulevard is required to accomodate bike lanes in both directions. This may be accomplished by narrowing/relocation sidewalks and/or narrowing the median. To narrow the median, it will be necessary to remove the left turn lane on southbound Laguna Honda Boulevard leading to the hospital. Given the curve of the roadway and the presence of buses, wider than normal traffic lanes are required.

Option 2



NOTE: There is currently room for either a through or left turn bike lane on the southbound Laguna Honda Boulevard approach to Dewey Boulevard if the roadway cannot be widened in that direction. "Sharrows" or a "ghost bike lane" should be considered for the southbound bicycle movement that is not accomodated by a bike lane. If only the northbound portion of the roadway can be widened, then this direction can have a bike lane as shown in Option 1.

Laguna Honda Blvd.

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Laguna Honda Blvd. (Plaza to Woodside) Cross-Section Concept Sheet
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

Option 1
Widening for bike lane
Shave island back for bike lane
Laguna Honda Blvd.
A
Plaza St.
Extend bike lane
Narrow median to two feet
Shave curb back to minimum sidewalk width allowable for local circumstances
Stripe northbound bike lane
Remove left-turn entrance to hospital
-Bike lane transition from through bike lane to left turn bike lane
Extend bike lane to intersection with Dewey Street (See note on section)
- Create left turn bike lane
- Convert shared turn/thru lane to left-turn only lane
- Restripe intersection and receiving lanes
B
Narrow median to two feet
Dewey Blvd.

LAGUNA HONDA BLVD.

Plaza St. to Woodside Ave.

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LAGUNA HONDA BLVD. (PLAZA TO WOODSIDE) CROSS-SECTION CONCEPT SHEET
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SUMMARY SHEET OUTLINE

MARKET STREET, OCTAVIA STREET TO 17TH STREET

Project Description

Market Street has the highest volume of bicycle traffic in the City. A bike count done in July 2002 showed that some sections of the street have bike volumes of over 200 cyclists per hour during the peak periods. Market Street is flat and connects much of the City's existing bicycle route network, including 14th Street, the Duboce Avenue Bikeway, Valencia Street, Page Street, 11th Street, Polk Street, 8th Street, 7th Street, and The Embarcadero. It also connects downtown to the neighborhoods with the highest bicycle usage: the Mission, the Castro, the Haight, Hayes Valley, and Western Addition. Upper Market Street (defined as Octavia Street to 17th Street for the purposes of this project) is characterized by wide intersections with intermittent medians and transit boarding islands. Vehicles move at higher speeds during off-peak hours on this upper segment and there are more vehicle turning movements at intersections due to fewer turning prohibitions. While bike lanes exist on much of this segment, they are discontinued at approaches to intersections where transit islands, narrow lanes, and existing parking lanes do not afford sufficient roadway width for a standard bike lane. Bicycle improvements to this segment of Market Street require analysis of the application of specific Supplemental Design Guideline standards, analysis of changes to existing lane configuration at specific intersections, and analysis of parking removal in some locations.

History/Background

Existing bike lanes on Upper Market Street were striped in 1984. The 1997 Bike Plan recommended various improvements to Market Street, but did not discriminate between the various segments and cross section variations along the street. The discontinuous nature of the existing bike lanes as a result of the transit island boarding platforms was noted, but no specific recommendations were made for addressing this design issue.

Design Segments

Three typical existing conditions diagrams are presented in the Concept Design Sheets for this project. Existing Condition, Typical 1 illustrates a Market Street intersection approach with a transit island, through lane, dedicated right turn lane, and curb, with curbside parking immediately upstream and partially overlapping with the transit island. Existing Condition, Typical 2 illustrates a Market Street intersection approach with a transit island, shared through/right-turn lane, corner bulb-out, and curbside parking adjacent to the transit island. Existing Condition, Typical 3 illustrates a Market Street intersection approach with a transit island, through lane, shared through/right-turn lane, corner bulb-out, and curbside parking adjacent to the transit island.

There are several design options presented for each typical Existing Condition. Options A, B, and C are presented for Existing Condition, Typical 1. Options D and E are presented for Existing Condition, Typical 2. Options F and G are presented for Existing Condition, Typical 3.

The design options are as follows:

A. *Shared Bicycle/Right Turn Pocket:* Dashed strip overlapping the inside of the dedicated right turn lane.
B. *Bicycle Channel:* A two- to three-foot wide channel striped between the existing through and right turn lanes.
C. *Remove Right Turn Lane:* Replace existing vehicle right turn lane with an extended bike lane.

D. *Curbside Bicycle Channel:* A two- to three-foot wide channel striped adjacent to the curb.
E. *Reduced Curb Extension and Remove Parking (if needed):* Shave back existing curb extension to provide width for an extended bike lane. Remove curbside parking adjacent to boarding island to extend bicycle lane.
F. *Curbside Bicycle Channel:* A two- to three-foot wide channel striped adjacent to the curb. (Similar to D, however the existing condition has an additional through lane).
G. *Reduced Curb Extension and Remove Parking (if needed):* Shave back existing curb extension to provide width for an extended bike lane. Remove curbside parking adjacent to boarding island to extend bicycle lane. (Similar to E, however the existing condition has an additional through lane).

Locations where each of the above options can be applied are shown on the attached Concept Design Sheets and listed below.

- Market Street and Noe Street Westbound: F, G
- Market Street and Noe Street Eastbound: A, B, C
- Market Street and Sanchez Street Westbound: A, B, C
- Market Street and Sanchez Street Eastbound: A, B, C
- Market Street and Church Street Westbound: A, B, C
- Market Street and Church Street Eastbound: D
- Market Street and Dolores Street Eastbound: A, B, C
- Market Street and Buchanan Street Westbound: D, E
- Market Street and Laguna Street Westbound: D, E
- Market Street and Guerrero Street Eastbound: D, E

Capacity

- Capacity loss at each intersection where lane removal is recommended should be evaluated to determine if additional design modifications are necessary.

Parking

Parking would be impacted at the following locations under the specific options:

- Market Street at Noe Street, Westbound
  F – no parking impact
  G requires removal of two to five parking spaces
- Market Street at Noe Street, Eastbound
  A, B and C require removal of two to four parking spaces
- Market Street at Sanchez Street, Westbound
  A, B and C require removal of two to four parking spaces
- Market Street t Sanchez Street, Eastbound
  A, B and C require removal of two to four parking spaces
- Market Street at Church Street, Westbound
  A, B and C require removal of two to four parking spaces
- Market Street at Church Street, Eastbound
  No parking impact
- Market Street at Dolores Street, Eastbound
  A, B and C require removal of two to four parking spaces
- Market Street at Laguna Street, Westbound

D – no parking impact
E requires removal of two to four parking spaces

- Market Street at Buchanan Street, Eastbound
  D – no parking impact
  E requires removal of two to four parking spaces
- Market Street at Guerrero Street, Eastbound
  D – no parking impact
  E requires removal of two to four parking spaces

Transit

- Muni service should not be impacted. Muni route 37 and the F-Line operate along this section of Market Street, while routes 22, 24, 35, and the J-Line cross it.

Pedestrian Concerns

- Narrowing corner bulb-outs will increase the crossing distance for pedestrians.

Land Use

- Upper Market Street is a regionally significant mixed-use commercial, retail and residential corridor. Existing land uses and businesses depend on access by all transportation modes, including pedestrian, bicycle, transit, and private vehicles.

Other Departments or Agencies

- Muni, DPW, Planning

Next Steps

- Capacity at each intersection where lane removal is recommended should be further analyzed to determine if design modifications to intersecting streets, approach lanes, or other mitigation measures are necessary.

EXISTING CONDITIONS

PROPOSALS

TYPICAL 1

THROUGH LANE AND RIGHT TURN LANE

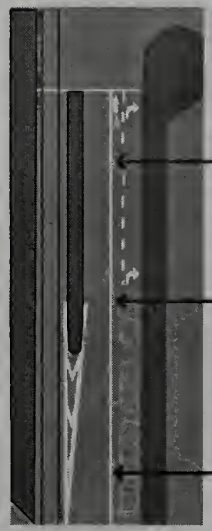
Through lane

Right-turn lane

Transit island

End existing bike lane (typical)

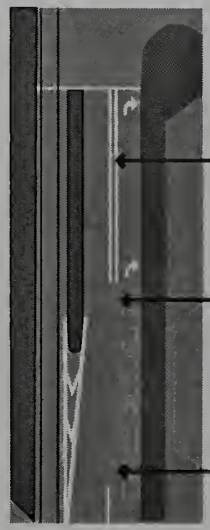
Ⓐ



Shared Bicycle/ Right Turn Pocket: 4-foot wide, dashed stripe overlapping inside of the right turn lane

Remove two to four parking spaces to allow for extension of bike lane to intersection

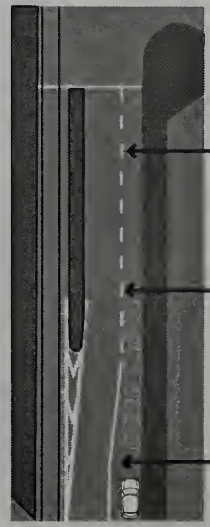
Ⓑ



Bicycle Channel: 2-foot to 3-foot wide channel striped between the existing through and right turn lanes

Remove two to four parking spaces to allow for extension of bike lane to intersection

Ⓒ



Remove Right-Turn Lane: Replace right-turn lane with an extended bike lane

Remove two to four parking spaces to allow for extension of bike lane to intersection

TYPICAL 2

SHARED THROUGH RIGHT TURN LANE

Curb extension

Shared through and right-turn lane

Metered parking

Transit island

End existing bike lane (typical)

Ⓓ

Curbside Bicycle Channel: 2-foot to 3-foot wide channel striped adjacent to curb

Ⓔ

Reduced Curb Extension: Shave back existing curb extension to provide width for extended bike lane

Remove Parking: Remove parking adjacent to boarding islands to extend bike lane

MARKET STREET

OCTAVIA STREET TO 17TH STREET

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MARKET STREET (OCTAVIA TO 17TH) CROSS-SECTION CONCEPT SHEET | SAN FRANCISCO BICYCLE PLAN UPDATE

PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

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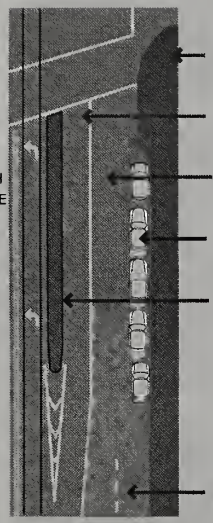
SF BIKE PLAN UPDATE

EXISTING CONDITIONS

TYPICAL 3

THROUGH LANE AND SHARED THROUGH RIGHT TURN LANE

-NOE, OUTBOUND



Curb extension

Through lane

Shared through& right-turn lane

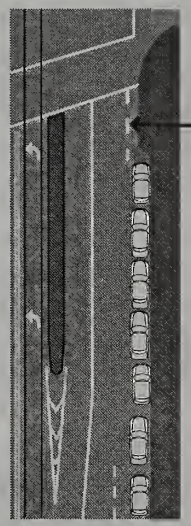
Metered parking

Transit island

End existing bike lane (typical)

PROPOSALS

Ⓕ



Curbside Bicycle Channel: 2-foot to 3-foot wide channel striped adjacent to curb

Ⓖ

Reduced Curb Extension: Shave back existing curb extension to provide width for extended bike lane

Remove Parking: Remove parking adjacent to shared right-through lane to extend bike lane

MARKET STREET

OCTAVIA STREET TO 17TH STREET

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MARKET STREET (OCTAVIA TO 17TH) CROSS-SECTION CONCEPT SHEET 2

SAN FRANCISCO BICYCLE PLAN UPDATE

PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SF BIKE PLAN UPDATE

17TH STREET
Striping of a westbound bicycle lane at the intersection with Castro and 17th Street would require removal of a westbound travel lane
16TH STREET
NOE STREET
MATCH LINE A
MARKET STREET
A B C
F G
CASTRO STREET
NOE STREET
16TH STREET

MARKET STREET

OCTAVIA STREET TO 17TH STREET

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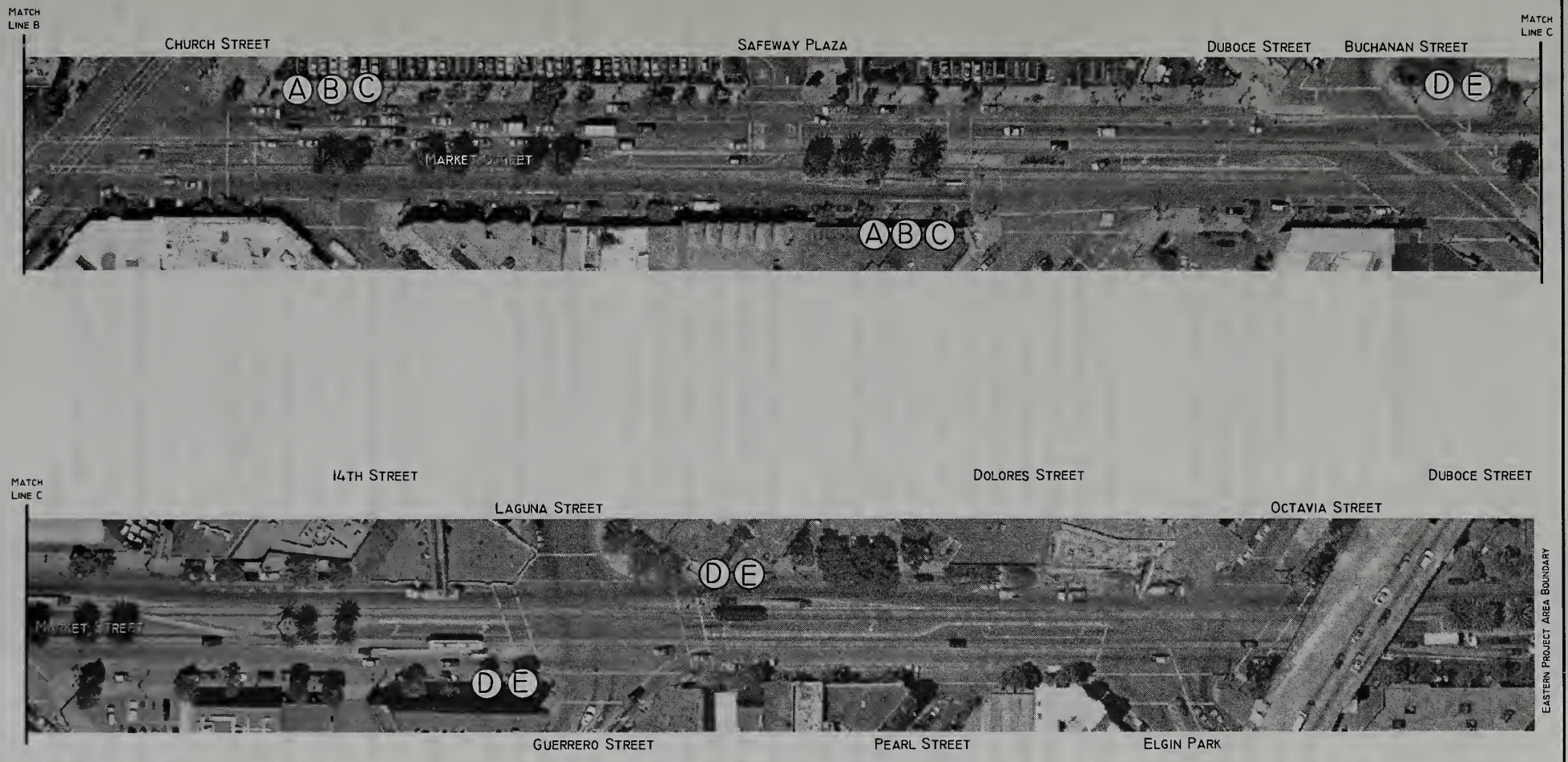
MARKET STREET (OCTAVIA TO 17TH) CROSS-SECTION CONCEPT SHEET 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SF BIKE PLAN UPDATE



MARKET STREET

OCTAVIA STREET TO 17TH STREET

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IMARKET STREET (OCTAVIA TO 17TH) CROSS-SECTION CONCEPT SHEET 4
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SF BIKE PLAN UPDATE

SUMMARY SHEET OUTLINE

MASONIC AVENUE, FELL STREET TO GEARY BOULEVARD

Project Description

Masonic Avenue is a high volume street extending from the Haight-Ashbury neighborhood in the south to the Geary Boulevard commercial corridor. Masonic Avenue provides access to the Panhandle of Golden Gate Park, to the University of San Francisco, and provides a connection to Presidio Avenue which leads into the Presidio and the Golden Gate National Recreation Area.

During peak-periods, Masonic Avenue has three travel lanes in the northbound direction and three to four lanes in the southbound direction. Masonic Avenue is generally uphill in the northbound direction, and has parking on both sides that is restricted according to the time of day. Many northbound cyclists who currently ride on Masonic Avenue use the wide sidewalk on the east side of the street, especially between Fulton Street and O'Farrell Street. On most blocks, the parking lane serves as a peak-period travel lane with parking prohibited on weekday mornings and evenings.

The width of the street in the project area ranges from 56 feet near Golden Gate Avenue to 77 feet near the Fell Street intersection. To allow for the installation of bike lanes, modifications to lane widths, uses, and configurations are required.

Integrated Transportation Management Systems (ITMS) should be considered in conjunction with all options presented for this project. The Masonic Avenue corridor is identified by the Department of Parking and Traffic SFgo ITMS section as a candidate for ITMS implementation. Possible design features include signal response to the actual volume of traffic and signal coordination with transit service. Implementing ITMS may make lane removals along this corridor possible without degrading transit service significantly.

A long-term option not addressed in detail in the attached design concepts includes potential roadway widening to provide additional width for a bicycle facility. This would require street tree removal and replacement, sidewalk narrowing and intersection reconfiguration that is beyond the scope of the short-term planning for the Bicycle Plan.

History/Background

As recommended in the 1997 Bicycle Plan, Masonic Avenue (between the Panhandle Path and Geary Boulevard) has been made part of the Bicycle Route 55 as a Class III facility. Other than bicycle route signage and some "Bikes Allowed Use of Full Lane" signage, no other bicycle-related improvements have been made to Masonic Avenue other than at the intersection at Fell Street (see Fell Street/Masonic Avenue Intersection Project). Creation of a sidewalk bikeway on Masonic Avenue has been suggested but not pursued due to concerns raised in the California Highway Design Manual and Americans with Disabilities Act (ADA) guidelines.

Design Segments

- Fell Street to Hayes Street: Currently, there are two southbound through lanes, a shared through/right-turn lane, and a dedicated right-turn lane at the intersection with Fell

Street. There are also three northbound travel lanes and parking on the east side of the street. A southbound through bike lane to the Panhandle Path can be provided by lane narrowing and conversion of the shared through/right-turn lane to right turn only. The bike merge required to access this bike lane must be considered while determining appropriate striping and signage.

- Hayes Street to Grove Street: In this section, there are three southbound travel lanes and a shared parking/peak-period travel lane in the southbound direction in addition to two northbound lanes and a shared parking/travel lane. With the existence of shared parking/travel lanes, bike lanes cannot be striped. Given the existing traffic volumes and transit service, a solution is required that has the potential to better serve transit. A peak-period bus/bike lane in conjunction with restricted parking may improve both bus travel times and conditions for bicyclists. Option 1 presents a shared bus/bike/restricted parking concept. Option 2 presents dedicated narrow parking lanes and a dedicated uphill bike lane, with the elimination of the two peak-period travel lanes. Option 3 requires parking removal to create a 10' wide shared bus/bike lane.
- Grove Street to McAllister Street: This segment has two travel lanes and shared parking/peak-period travel lanes in each direction. As with the above segment, bike lanes cannot be striped with the existence of shared parking/travel lanes. Given the existing traffic volumes and transit service, a solution is required that has the potential to better serve transit. A peak-period bus/bike lane in conjunction with restricted parking may improve both bus travel times and conditions for bicyclists. Option 1 presents a shared bus/bike/restricted parking concept. Option 2 presents dedicated narrow parking lanes and a dedicated uphill bike lane, with the elimination of the two peak-period travel lanes. Option 3 requires parking removal to create a 10' wide shared bus/bike lane.
- McAllister Street to O'Farrell Street: This segment has a similar cross-section as the previous segment, but the lane widths are slightly narrower. A similar design solution is required as with the above two segments, but the shared bus/bike lane would be only 14' wide as opposed to 15'. Option 2 presents a peak-period bike lane with parking restrictions, requiring elimination of the two peak-period travel lanes. Though not shown in the cross-sections, there could be an Option 3 as shown for segments B and C (Hayes to O'Farrell Streets), which requires parking removal to create a 10' wide shared bus/bike lane.
- O'Farrell Street to Geary Boulevard: This section of Masonic Avenue has three travel lanes in each direction and parking on both sides of the street. Near the intersection with Geary Boulevard, the parking on the east side of the street is eliminated to provide a right-turn lane. There is also a 14' center median, south of the Geary intersection that is approximately 200' long. Two design options are presented. Option 1 presents parking removal in order to create available width for 6' bike lanes in each direction. A second option, requiring additional investigation, is to remove the southbound left-turn lane on this segment and narrow the existing median, in order to preserve existing on-street parking, stripe a bike lane, and maintain three southbound travel lanes.

Capacity

- Masonic Avenue as is, with sub-10' wide lanes, No Left Turn restrictions at various times of the day, peak period tow-away lanes on both sides of the street, minimal unused capacity, and lack of parallel arterial, makes the removal of a motor vehicle lane and installation of a bike lane very difficult without severely disrupting traffic and transit flow along the street. However, this street may be an ideal candidate to install an Integrated Transportation Management System to allow for lane removals without significantly

decreasing the capacity of the street and degrading current levels of transit operations. Further study is required.

Transit

- Muni operates the 43 Masonic with 10 minute headways during peak periods and 12-20 minute headways during off-peak periods.
- Implementation of a shared bus/bike lane requires close coordination with transit planning and operations

Parking

- Since the parking lanes are currently restricted by time, a conversion from the shared parking/travel lanes to full-time parking lanes will increase parking capacity. However, Option 1 of Segment E, O'Farrell Street to Geary Boulevard, would result in parking loss. Also, removal of parking for a full-time bus/bike lane (Option 3) would result in significant parking loss, though this option could be modified to operate only during the peak periods as the shared parking/travel lanes operate today, which would result in no change.

Pedestrian Concerns

- Pedestrian safety along the Masonic Avenue corridor from Fell Street to Geary Boulevard would not be significantly impacted by the proposed bicycle improvements. A full-time parking lane can improve pedestrian comfort on sidewalks by providing a buffer, but the improvement on Masonic Avenue would be less significant as the wide sidewalks and mature trees (where present) already serve as a buffer.

Land Use

- Land use east of Masonic Avenue is primarily residential. University of San Francisco buildings and primarily multi-flat residential building are located along the western frontage of Masonic Avenue. The northern segment of the project site serves some commercial and institutional uses, including a significant square footage of retail.

Other Departments or Agencies

- Coordination with Muni regarding implementation of a shared bus/bike lane with parking restrictions is required to determine the most appropriate design for each segment of the project. Bicycle improvements for each block must be carefully designed with bus operations as a chief design consideration.

Next Steps

- Capacity analyses associated with travel lane reductions should be conducted by DPT.
- Transit operations analysis should be conducted for transit impacts due to proposed bicycle improvements and travel lane reconfigurations.
- Implementation of an Integrated Transportation Management System to offset capacity reduction and impacts to transit operations should be evaluated by DPT's SFgo section.

1. Masonic and Fell, looking south towards the Panhandle. The Fell/Masonic intersection is part of a separate Priority Project.

2. Masonic near Hayes, looking south. There are two travel lanes in each direction plus an additional shared-parking/travel lane on either side.

3. Masonic near Hayes, looking north. Northbound (uphill) bicyclists often use the wide sidewalk to avoid fast-moving traffic.

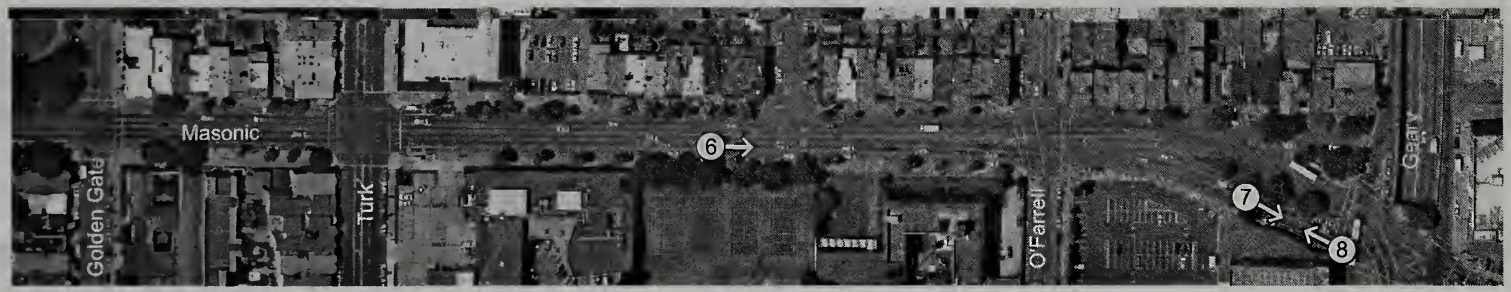
4. Masonic near Fulton, looking north. Left turns are prohibited at this (and other) intersections on Masonic in order to allow for greater throughput capacity.

5. Masonic near McAllister, looking west towards SFSU. There is relativeley low demand for parking on the west side of the street.

6. Masonic near O'Farrell, looking north. This area is primarily residential.

7. Masonic and Geary, looking north. The bike route jogs to the east (right) and continues northbound on Presidio.

8. Masonic and Geary, looking south. This intersection may require an innovative treatmenta to safely accommodate bicyclists.



MASONIC AVENUE

FELL STREET TO GEARY BLVD.

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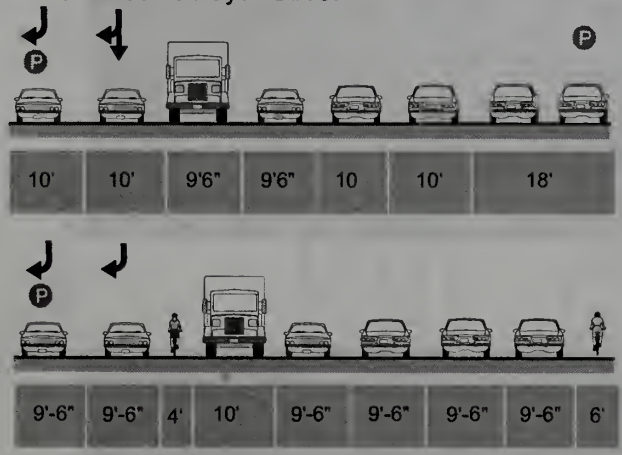
MASONIC AVENUE EXISTING CONDITIONS
SHEET 1 OF 1 (FELL STREET TO GEARY BLVD.)
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

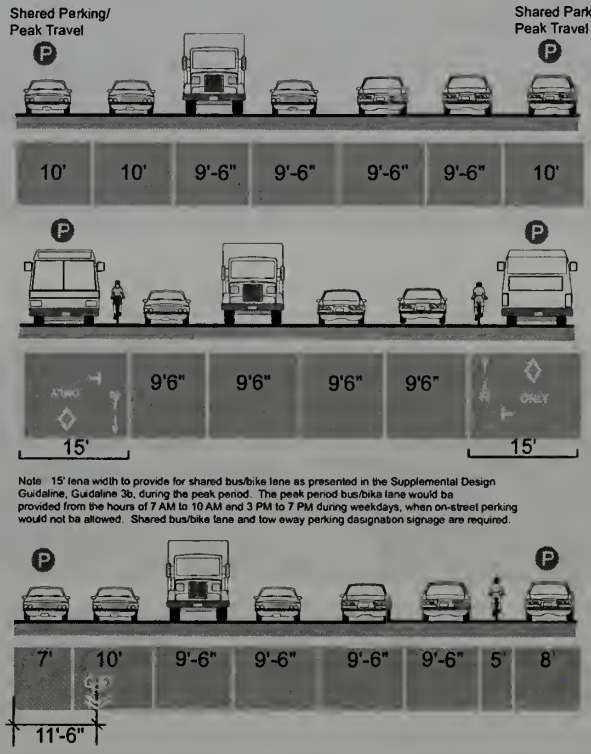
SF BIKE PLAN UPDATE

Street Cross-Sections (facing Geary Blvd.)

A: Fell Street to Hayes Street

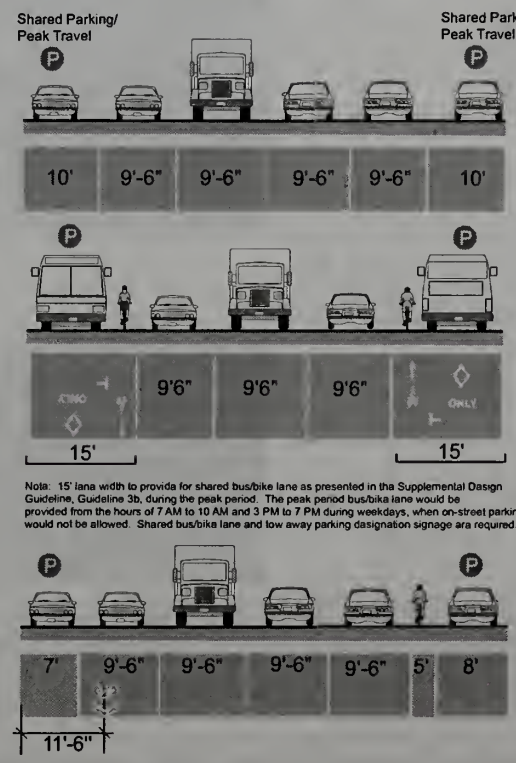


B: Hayes Street to Grove Street



Note: 15' lane width to provide for shared bus/bike lane as presented in the Supplemental Design Guideline, Guideline 3b, during the peak period. The peak period bus/bike lane would be provided from the hours of 7 AM to 10 AM and 3 PM to 7 PM during weekdays, when on-street parking would not be allowed. Shared bus/bike lane and tow away parking designation signage are required.

C: Grove Street to McAllister Street



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MASONIC AVENUE
FELL STREET TO GEARY BLVD.

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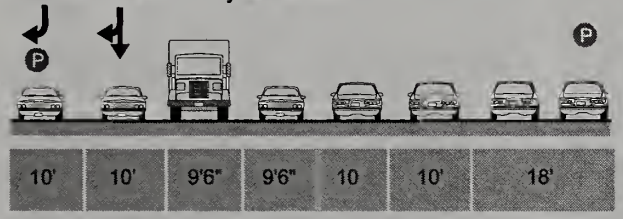
MASONIC STREET (FELL TO GEARY) CROSS-SECTION CONCEPT SHEET 1 OF 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

Street Cross-Sections (facing Geary Blvd.)

A: Fell Street to Hayes Street

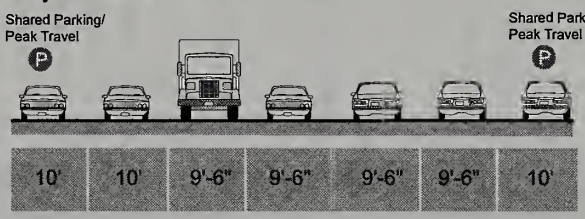
Existing



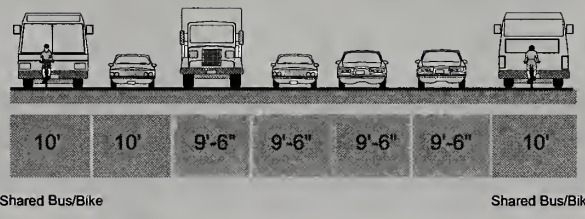
Option 3

B: Hayes Street to Grove Street

Existing

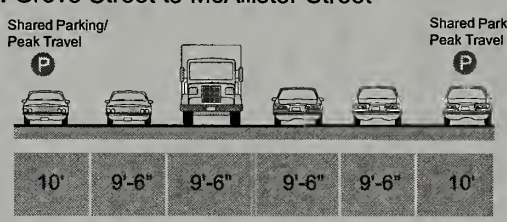


Option 3

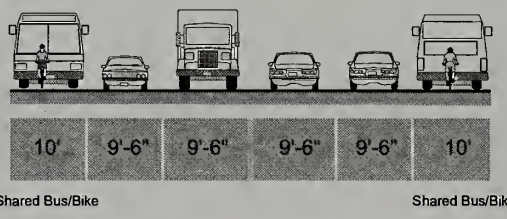


C: Grove Street to McAllister Street

Existing



Option 3



MASONIC AVENUE

FELL STREET TO GEARY BLVD.

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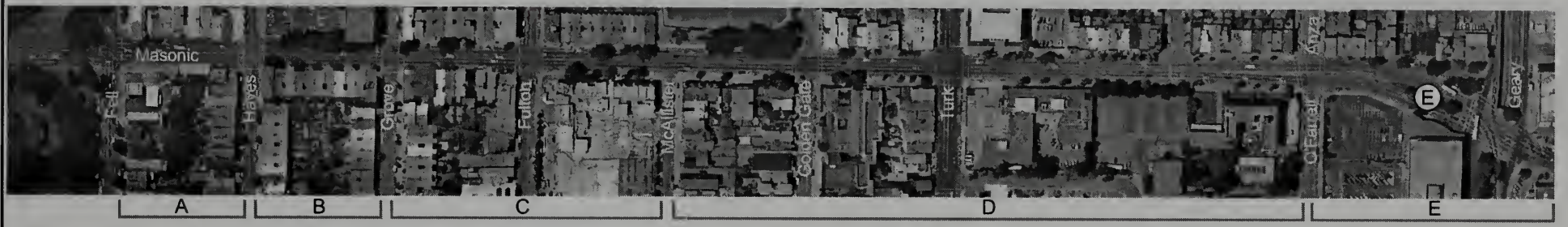
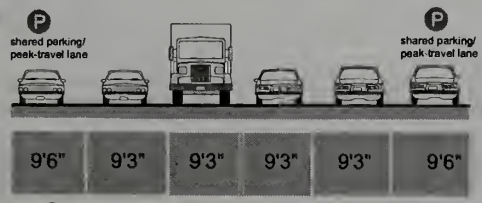
MASONIC STREET (FELL TO GEARY) CROSS-SECTION CONCEPT SHEET 2 OF 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS



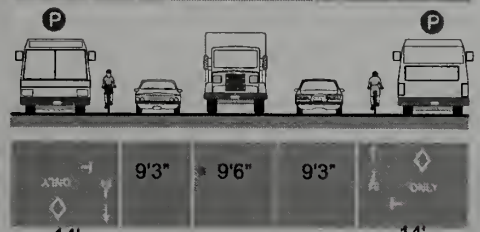
Street Cross-Sections (facing Geary Blvd.)

D: McAllister to O'Farrell

Existing

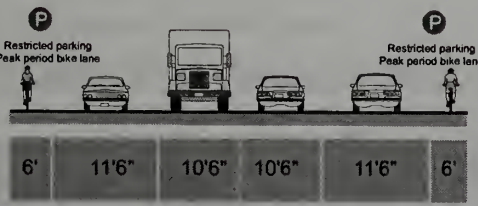


Option 1

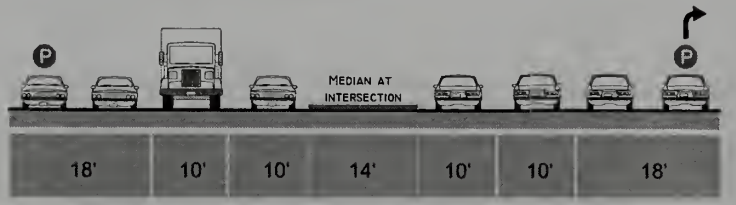


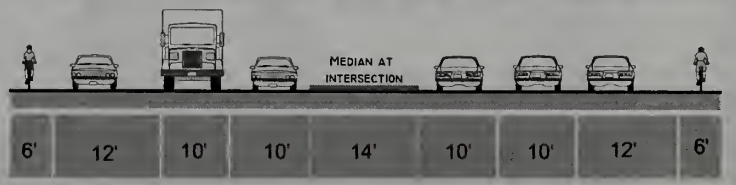
Note: 14' lane width to provide for shared bus/bike lane es presented in the Supplemental Design Guideline, Guideline 3b, during the peek period. The peak period bus/bike lane would be provided from the hours of 7 AM to 10 AM and 3 PM to 7 PM during weekdays, when on-street parking would not be allowed. Shared bus/bike lane and tow away parking designation signage are required.

Option 2



E: O'Farrell to Geary





Option 2 for Segment E should include investigation of the southbound left-turn lane on Masonic Avenueand narrowing of the existing four foot median to provide for a three travel lanes, maintain existing parking, and a bicycle lane.

Masonic Avenue

Fell Street to Geary Blvd.

This draft diagram is designed for public input and discussion purposes. This is a representative diagram and is not based on actual survey data. All information presented in this diagram is subject to modification.

DRAFT 3/24/04

Masonic Street (Fell to Geary) Cross-Section Concept Sheet 3 of 3
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

OAKDALE STREET (BAYSHORE BLVD. TO 3RD STREET)

SUMMARY SHEET OUTLINE

General Project Description

The proposed Oakdale Avenue bicycle facility would connect Bayshore Boulevard to Third Street, taking advantage of existing bicycle lane segments from Phelps Street in the west to Industrial Street in the east. Land uses surrounding Oakdale Avenue are predominantly light industrial and warehouse, resulting in frequent truck traffic and high parking utilization during business hours. Oakdale Avenue is the Bicycle Route 170, and provides a valuable connection from the Third Street corridor to Bayshore and the Bernal Heights neighborhood.

Oakdale Avenue's cross-streets include: Patterson Street, Loomis Street, Barneveld Avenue, Toland Street, Industrial Street, Selby Street, Rankin Street, Quint Street, Dunshee Street ,Phelps Street, Newhall Street, and Third Street.

History/Background

- A preliminary feasibility study comparing Oakdale Avenue and Palou Avenue for bicycle lanes was completed by Department of Parking and Traffic, showing Oakdale to be a superior route based on less Muni presence, a more acceptable grade, and other land use factors.
- Continuous bicycle lanes are identified in 1997 Bicycle Plan as a project.
- Presence of bicycle facilities in industrial area was a concern when current bike lanes were studied and legislated.

Design Segments (west to east):

- Existing lane configuration from Bayshore Boulevard to Loomis Street eastbound and from Loomis Street to Bayshore Boulevard westbound needs to be preserved based on preliminary assessment of lane requirements for existing turn movements– this does not allow for bicycle lanes west of Loomis Street unless parking is removed within this block.
- Optional treatments for Loomis Street to Bayshore Boulevard westbound include (1) removal of parking (dependent on parking utilization study and investigation of potential locations for parking replacement) and (2) removal of dedicated left turn lane
- West of Barneveld Avenue, Oakdale Avenue has high parking utilization, including both private and commercial vehicles, with two travel lanes in each direction.
- From Industrial Street to Barneveld Avenue westbound and Barneveld Avenue to Industrial Street eastbound, removal of one vehicle lane in each direction would allow for installation of a 12' wide two-direction center turn lane and 5' bicycle lanes in each direction.
- Area under I-280 overpass at intersection of Oakdale Avenue, Selby Street and Industrial Street is a large intersection that requires further study in order to determine appropriate design for bicycle lanes (including intersection approach east of Selby).
- Existing bicycle lanes are in place from Selby Street to Phelps Street.

- From Phelps Street east to Third Street requires removal of the second eastbound travel lane to gain width for development of 5' bicycle lanes in each direction.
- At Third Street and Oakdale Avenue the intersection and turn lane configuration per Muni/DPW plans must be maintained, requiring bicycle lanes to begin and end 150 feet west of the planned intersection bulb outs. Feasibility of eastbound lane removal should be studied after the completion of the 3rd Street Light Rail project is completed.

Capacity

- Traffic lane transitions would be needed on Oakdale Avenue between Bayshore Boulevard and Loomis Street. **Traffic counts are currently being conducted to assess the intersection needs at Oakdale Avenue/Bayshore Boulevard.** Counts will determine the feasibility of optional treatment presented in Section A.
- Oakdale Avenue between Industrial Street and Barneveld Avenue would be converted from two vehicle travel lanes in each direction with parking on both sides to one vehicle travel lane in each direction, a center two-way left-turn lane, and bicycle lanes in each direction next to the parking lanes. Under this "road diet", each of the single travel lanes would operate at just under capacity conditions during the weekday peak periods.
- Phelps Street east to Third Street requires removal of the second eastbound travel lane (which transitions to a right-turn only lane at Third Street) to gain width for development of 5' bicycle lanes in each direction. After the Third Street Light Rail Project is constructed, an analysis of level-of-service should be conducted to determine potential impacts associated with removing this lane.

Transit

- The 23 Monterey runs on Oakdale Avenue between Bayshore Boulevard to Toland Street. Potential conflicts between existing bus stop zones and the proposed bicycle lane must be addressed as a part of the final design.
- Effects of lane removals and any truck parking changes need to be analyzed to determine if traffic impacts would negatively impact the 23 Monterey line.

Parking

- No curbside parking removal is required unless bicycle lanes between Bayshore Boulevard and Loomis Street are to be installed. This would result in the loss of ten parking spaces.
- Outreach to local businesses regarding their ability to use center turn lane for truck loading/unloading as well as likelihood of double-parking blocking the one remaining through lane is each direction is recommended

Trucks

- Truck circulation and parking issues are most significant on Oakdale from Industrial Street west to Bayshore Boulevard where truck double parking and perpendicular parking in short loading bays results in trucks extending into travel lanes, which would block the proposed bicycle lanes

- Analysis of truck parking needs of specific businesses may allow for relocation or reconfiguration of specific truck loading bays to promote clear bicycle lane. Extensive targeted outreach is required to address this topic.

Pedestrian Concerns

- Condition for pedestrians crossing Oakdale Avenue may be improved where two lanes in each direction are converted to one lane in each direction plus a center two-way left-turn lane.

Land Use

- The Oakdale Avenue corridor is primarily light industrial and warehouse with residential extending from Phelps Street in the west to Third Street in the east.
- Land use conflicts between industrial land uses and designated bicycle lanes need to be addressed in outreach for this project.

Other Departments/Agencies

- Muni and DPW should be consulted regarding the bike lane intersection with Third Street after the completion of the 3rd Street Light Rail. Muni should also be consulted if there are impacts to operation of 23 Monterey at the west end of the project area.

Preliminary Cost Estimate:

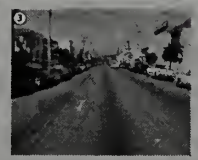
- $56,000

Next Steps

- Outreach to local businesses to address truck parking and access needs.
- Traffic counts are currently being conducted to assess the intersection needs at Oakdale Avenue/Bayshore Boulevard.

1. View of Oakdale looking easterly towards Third Street intersection. The lane on the right is a dedicated right-turn.

2. View of Oakdale looking westerly from west of Third Street. Note that the right-turn lane (shown on the left side) starts one block from the intersection.



3. Looking westerly towards Phelps. This section 60-foot wide section includes parking on both sides, two eastbound traffic lanes, and one westbound traffic lane.

4. Looking westerly through the all-way stop sign-controlled Phelps intersection. Note that Oakdale widens to 60 feet west of the intersection and includes Class II bicycle lanes.

5. Looking westerly toward the I-280 overpass crossing over Oakdale, the existing bike lane ends.

6. Underneath the I-280 overpass, looking northwesterly. Selby and Industrial intersect with Oakdale, creating a complex five-way stop.

7. West of Toland, Oakdale has a 20 feet wide curb lane that is often occupied by loading commercial vehicle during business hours.

8. West of Bameveld, Oakdale has high parking utilization for both private and commercial vehicles. Parking is both local employees and regional shopping trips to the many small building materials sellers.

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Oakdale Avenue

Existing Conditions

OAKDALE AVENUE EXISTING CONDITIONS SHEET 1 OF 1
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

alta
BIKE PLAN UPDATE
SAN FRANCISCO DPT DEPARTMENT OF PARKING & TRAFFIC

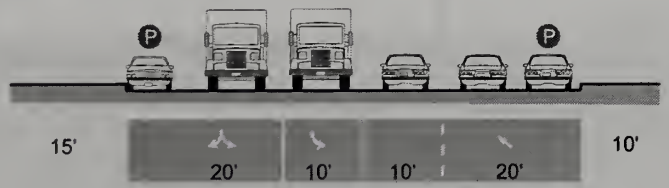
Oakdale Avenue

Design Concept

Option: Continue bicycle lane through to Bayshore, requiring removal of parking or travel lane, additional investigation of traffic volumes and parking utilization from Bayshore to Loomis
A
Remove one travel lane each direction, create center dual turn lane and add bicycle lanes for typical section
B
Bayshore
Loomis
Barneveld

Sections

Ⓐ Existing Section/Elevation



Section B shown on Page 2

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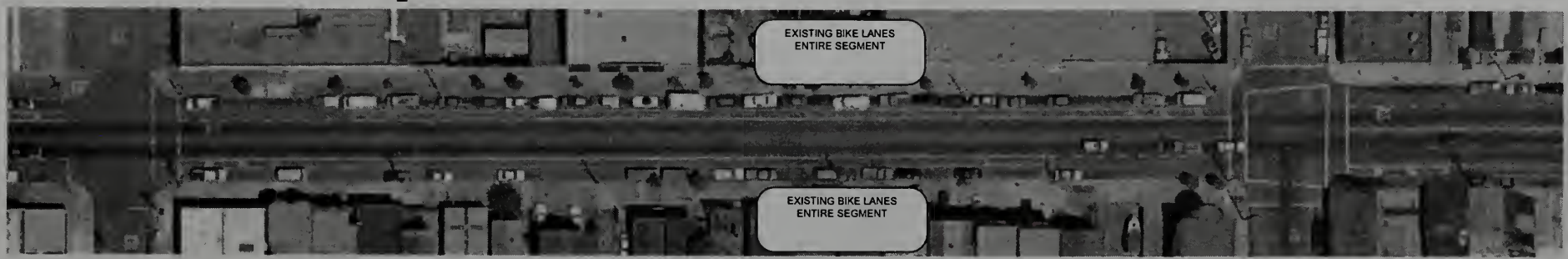
OAKDALE AVENUE DESIGN CONCEPT SHEET 1 OF 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

Oakdale Avenue

Design Concept

Remove one travel lane each direction, create center dual turn lane end edd bicycle lanes for typical section
Western terminus of existing west bound bike lane segment
Western beginning of existing eastbound bike lane segment

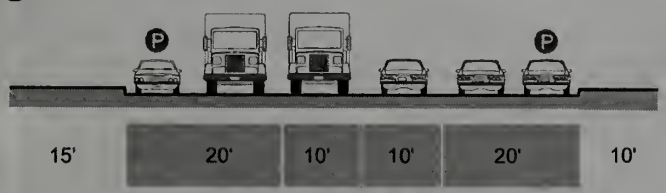
Industrial I-280 Selby



Rankin Quint

Sections

Ⓑ Existing Section/Elevation



Ⓑ Proposed Section/Elevation

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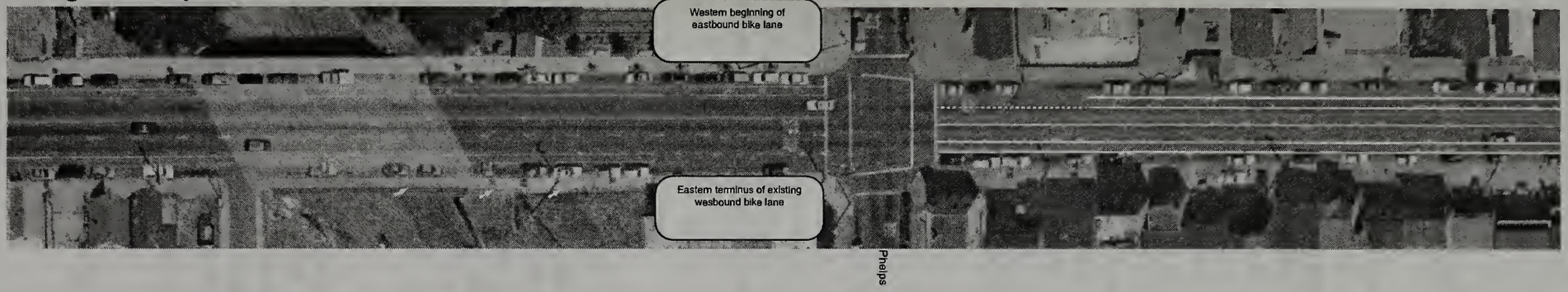
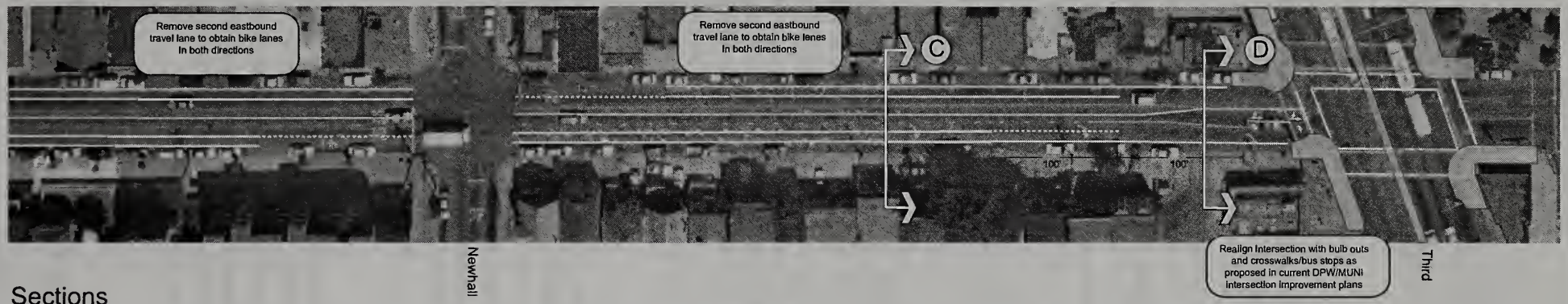
OAKDALE AVENUE DESIGN CONCEPT SHEET 2 OF 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

Oakdale Avenue

Design Concept

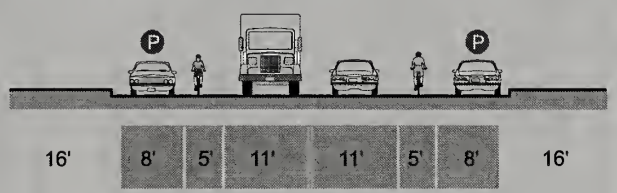



Remove second eastbound travel lane to obtain bike lanes in both directions
Remove second eastbound travel lane to obtain bike lenes in both directions
C
D
100'
100'
Realign intersection with bulb outs and crosswalks/bus stops as proposed in current DPW/MUNI intersection improvement plans
Third
Newhall

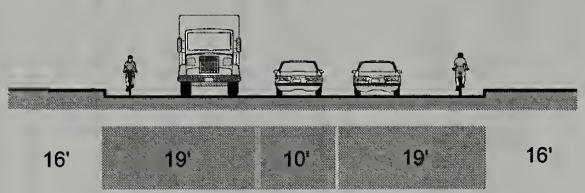
Sections

Ⓒ Existing Section/Elevation

Ⓒ Proposed Section/Elevation



Ⓓ Proposed Section/Elevation



DRAFT 10/22/03

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OAKDALE AVENUE DESIGN CONCEPT SHEET 3 OF 3
SAN FRANCISCO BICYCLE PLAN UPDATE
PRELIMINARY ENGINEERING PRIORITY PROJECT SHEETS

SUMMARY SHEET OUTLINE

POLK STREET, MARKET STREET TO MCALLISTER STREET

Project Description

Polk Street is a medium volume downtown street in the Civic Center section of San Francisco. Polk Street serves the western sides of both Russian Hill and Nob Hill, and serves as the primary north-south bicycle connection with the nearest parallel routes located on Sansome/Battery Streets and Arguello Street. The primary importance of this route is as a connection between the south/central area of the city to the northern waterfront. Polk Street is one-way southbound only between Grove Street and Market Street, adding complexity to the design requirements for improving this route. The street is two-way north of Grove Street. There are two-way bike lanes north of McAllister and a southbound bike lane between McAllister and Market. In order to improve bicycling conditions on Polk Street, a "contra-flow" lane could be added on Polk Street heading northbound on the east side of the street. This could improve northbound bicycle access from Market St. to the Civic Center and Nob Hill districts. Currently, many cyclists ride (illegally) northbound on the eastside sidewalk to access the bike lanes on Polk, north of McAllister St.

In the section between McAllister and Market, Polk Street has two lanes of travel in the southbound direction with parking interspersed along the street. Between McAllister and Grove, there is diagonal parking on the east side of the street. On the west side, there is parallel parking. Between Grove and Hayes, parking is allowed, but restricted, and between Hayes and Market, there is no on-street parking. The street serves commercial and office uses. The street is 48'9" wide between Market and Grove Street and widens to 71' between Grove Street and McAllister Street. To allow for the installation of bike lanes, one travel lane would need to be removed on the 48'9" section.

History/Background

As recommended in the 1997 Bicycle Plan, Larkin Street between Market Street and McAllister Street has been made part of northbound Bicycle Route 25 as a Class III facility, since Polk Street is one way between Grove and Market Streets. Other than bicycle route signage, no other bicycle-related improvements have been made to this section of Larkin Street. A northbound contra-flow lane on Polk Street between Market and Grove Streets has been suggested, but not pursued due to other priorities and lack of resources.

Design Segments

- *Market to Hayes*: Currently, there are two southbound through lanes, a striped 5' bike lane, and a 12'-9" parking lane on this section of Polk Street. "Contra-Flow," northbound bike lanes could be provided on this segment without the removal of travel lanes since there is no on-street parking and a large buffer on the east side of the street. A transition from Market Street to the contra-flow lane will need to be carefully designed so that it does not put bicyclists in danger.

- *Hayes to Grove*: In this section, there are basically two southbound travel lanes and a 4' bike lane. Parking is allowed on both sides of the street between Grove Street and Lech Walesa and on the east side of the street only between Lech Walesa and Hayes Street. In order to add the northbound bicycle lane, parking could be removed to provide for a buffer and curbside bike lane.

- Grove to McAllister: This segment currently has two southbound travel lanes, a southbound bike lane, and one northbound travel lane. The street widens to 71' in this section. It has parallel parking on the west side of the street and diagonal parking on the east side of the street. If the existing diagonal parking was converted to parallel parking, bike lanes could be provided without the need for lane removal.

Capacity

- **The impact of travel lane reductions to traffic operations on Polk Street should be studied.**

Transit

- The 21-Hayes operates on the subject segment of Polk Street, from Market Street to Grove Street, with a PM peak hour service frequency of 6 minutes, and an average weekly ridership of 13,579. Because the southbound traffic lanes will be separated from the proposed northbound traffic lane by a physical barrier or buffer, implementing the proposed bike lane is not expected to have significant impacts on Muni services. Muni also has a proposal for a contraflow lane for the 21-Hayes to Market Street.

Parking

- If a traffic analysis shows that a travel lane cannot be removed, then some of the on-street parking may need to be removed. Between Lech Walesa and Grove, there are 11 parking spaces that would need to be removed. Currently, these are metered spaces. There is also a truck loading zone that would need to be modified to accommodate a contra-flow lane.

Pedestrian Concerns

- The proposed bicycle improvements may benefit pedestrians because the proposed project may reduced sidewalk riding in this area.
- The required sidewalk narrowing adjacent to Fox Plaza may reduce pedestrian capacity at the peak period. The higher volumes of pedestrians on Market Street and intersecting streets during the AM peak period, PM peak period and during special events should be considered prior to narrowing the existing sidewalk from 17' to 12'.

Land Use

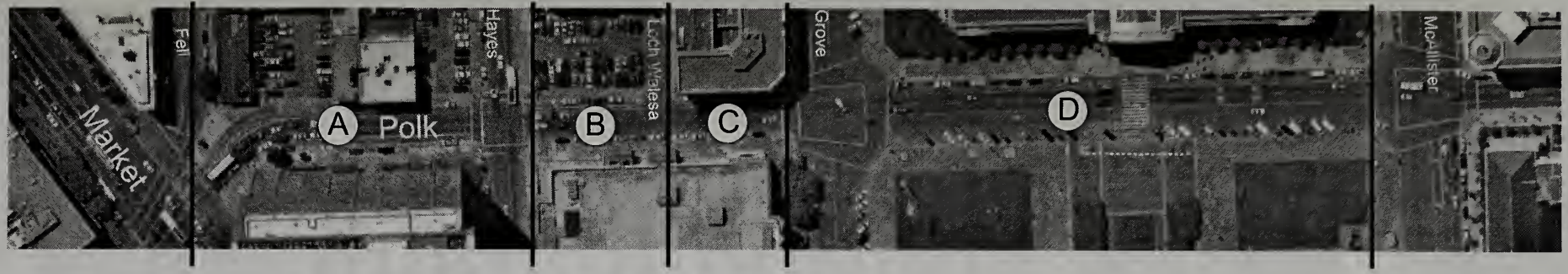
- The land use along Polk Street is comprised of a mix of residential, office, and general commercial. Sidewalk narrowing adjacent to Fox Plaza should be considered due to the high density residential surrounding the project area. The safety and experience of the high volumes of pedestrians in this area should not be compromised.

Other Departments or Agencies

- Coordination with Planning and Public Works is recommended. Additional outreach to adjacent property owners is recommended.

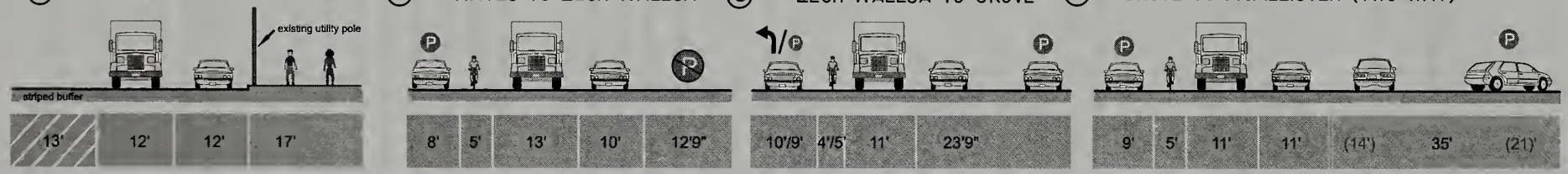
Next Steps

- Capacity analyses associated with the travel lane reduction should be conducted by DPT.

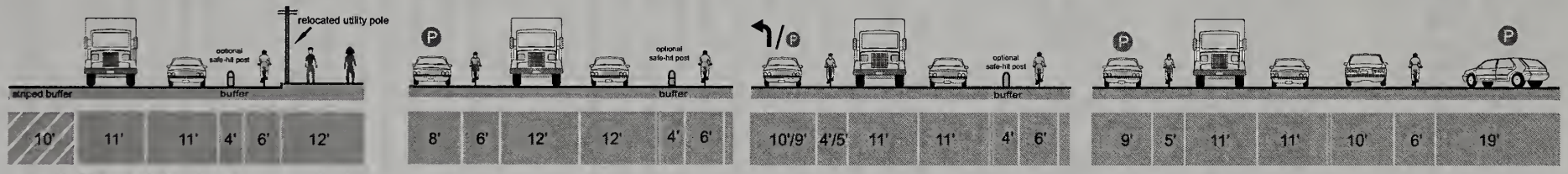


Street Cross-Sections (looking north towards McAllister)

Existing



Option 1



Southbound bike and parking lanes end on the southbound approach to Market Street and are replaced by striped median on the westside of Polk approaching the Polk/Fell/Market intersection. Narrowing and other modifications to this striping pattern must be carefully designed to ensure that new striping safely guides southbound motorists through the Polk/Fell merge onto 10th Street.

Southbound curb lane functions as a turn lane (10') between Hayes and Lech Walesa, and a parking lane (9') between Lech Walesa and Grove

BIKE PLAN UPDATE

Polk Street

Market to McAllister

This draft diagram is designed for public input and discussion purposes. This is a representative diagram and is not based on actual survey data. All information presented in this diagram is subject to modification.

DRAFT 1/19/04

Polk Street (Market to McAllister) Cross-Section Concept Sheet
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

SUMMARY SHEET OUTLINE

PORTOLA DRIVE, CORBETT STREET TO SAINT FRANCIS BOULEVARD

Project Description

Portola Drive is a moderate volume arterial connecting upper Market Street in the east to the Sunset in the west. Portola Drive is an important bicycle route providing the Sunset, San Francisco State University environs, and Mt. Davidson neighborhoods with a connection to Downtown San Francisco. This route is important for both recreational and commuting purposes.

The eastern reaches of Portola Drive are characterized by apartment housing and commercial land uses. As Portola continues west it is characterized increasingly by single-family residential land uses. Portola Drive has a center median that varies in width, generally narrowing at intersections to provide width for left-turn pockets.

History/Background

Route 50 is addressed in the 1997 Bike Plan. The Plan notes that curb lanes along Portola were recently widened at the time the plan was published. No other bicycle facility improvement recommendations are made for this corridor.

Design Segments

- *A. St. Francis to Santa Ana*: The existing condition is two lanes in each direction with on-street parking and a median. Generally, the median is 4 feet wide and the curb to curb width is 32 feet westbound and 32 feet eastbound. The existing lanes can be narrowed to create an uphill bike lane, as shown in Option 1. Parking removal is not recommended in the westbound downhill direction on this segment and there is not adequate width to provide for a downhill bike lane. The shared use pavement arrow and "bikes allowed full use of lane" signage should be considered for installation on every other block to inform motorists that bicycles should be anticipated on this roadway and are allowed full use of the curb lane.

- *B. Santa Ana to Santa Clara*: The existing condition is two lanes in each direction with variations in lane width and median width. Generally, the median is 14 feet wide and the curb to curb width is 32 feet westbound and 32 feet eastbound. The median narrows to accommodate a left turn pocket at some intersections. The existing lanes can be narrowed to create an uphill bike lane in the eastbound direction, as shown in Option 1. In eastbound direction, there is a pinch immediately east of Vicente Street. Option 1 should include removal of two to three parking spaces in eastbound direction to accommodate the recommended bike lanes. Portola widens east of this short segment and other parking removal is not required.

  Parking removal is not recommended in the westbound downhill direction on this segment and there is not adequate width to provide for a downhill bike lane. The shared use pavement arrow and "bikes allowed full use of lane" signage should be considered for installation on every other block to inform motorists that bicycles should be anticipated on this roadway and are allowed full use of the curb lane.

- *C. Santa Clara to Waithman*: The existing condition is two lanes in each direction with variations in lane width and a center median. Generally, the median is 4 feet wide and the curb to curb width is 32 feet westbound and 32 feet eastbound. The existing lanes can be narrowed to create an uphill bike lane, as shown in Option 1. On the eastbound side of Portola, there is limited parking demand from San Pablo Avenue east past the merge with Miraloma Drive (past the triangle-shaped merge island). No homes front this segment of the street, presenting and opportunity to remove parking to create a wider, curbside bike lane.

  Approximately 8 spaces from San Pablo east could be removed and all the spaces (about 6) could be removed from the merge median. On the westbound side of Portola, a similar segment exists where parking removal is feasible immediately west of Waithman Way. No homes abut this street segment where the proposed parking removal would create an opportunity for a wider curbside bike lane that would provide bicyclists with greater room for the transition from the parallel side street.

- *D. Waithman to Sydney/Fowler*: The Eastbound existing lane configuration varies on this segment. Eastbound curb to curb width is generally 32 feet. From Waithman Way east to Evelyn Way there are two travel lanes and on-street parking. East of Evelyn Way, continuing to Fowler Avenue, on-street parking is discontinued and there are three travel lanes. The median width is generally 14 feet, which accommodates turn lanes at intersections.

  The westbound curb to curb width is generally 26 feet with a 3 feet wide divider from the 19' wide parallel neighborhood street. The preferred option is to route the bike route on the neighborhood street, providing special signage along the roadway and an early curb cut to allow westbound bicyclists to safely reenter Portola prior to the intersection where the westbound neighborhood street terminates.

- *E. Sydney/Fowler to Twin Peaks*: The eastbound existing condition is three lanes eastbound from Fowler Avenue to Teresita Boulevard. From Teresita Boulevard east to O'Shaughnessy the median narrows and provides for a dedicated left turn lane and three eastbound through lanes. Continuing east from O'Shaugnessy there is short drop of the dedicated left-turn, followed by a left-turn pocket serving Twin Peaks Boulevard, and three eastbound through lanes. The center median varies in width to provide for the left turn pockets describe above.

  Westbound, the segment between Twin Peaks Boulevard and Woodside Avenue provides a dedicated right turn lane, two through lanes, and two dedicated left turn lanes serving O'Shaugnessy. From Woodside Avenue to Sydney Way, Portola provides three through lanes.

  Due to the complex variations in lane configuration, dedicated turn lanes, and varying median width removal of the outside travel lane would be required to provide for the eastbound bike lane and a striped buffer in Option 1. Traffic lane removal would be required both eastbound and westbound for Option 2. Intersection capacity and operations at each of the major intersections included in this segment must be closely analyzed.

- *F. Twin Peaks to Clipper*: Eastbound existing condition is three lanes eastbound leading to the intersection with Clipper Street where the curbside lane becomes a dedicated right turn lane leading to a stop sign and crosswalk at the intersection divider island. Westbound existing condition is three travel lanes.

  Eastbound lane narrowing from 14, 11, and 11 foot lane widths create sufficient width for a 5 foot bike lane. The eastbound bike lane would continue adjacent to the outside curb through the dedicated right turn lane serving Clipper Street. Special signage indicating to bicyclists to continue to the stop sign at Clipper is required for this recommendation. At the intersection divider island stop sign, special signage is required to direct bicyclists across the pedestrian crosswalk to the island where they could reenter Portola Drive. Special consideration must be given to all signage on this segment as bicyclists should not be encouraged to cross the high speed dedicated right turn lane from the curbside bike lane west of the pedestrian crosswalk. Special striping or other reconfiguration of the divider island would also be required to make this design approach obvious to bicyclists and motorists.

  Westbound lane narrowing from 14, 12 and 12 foot lane widths can create sufficient width for a 5 foot bike lane. The bike lane would be required to begin __ feet west of Burnett Avenue, due to narrower lane widths immediately west of Burnett.

- *G. Clipper to Corbett/Market*: Eastbound existing condition is two lanes immediately east of Clipper Street with a wide outside lane to allow for merging of multiple travel lanes and acceleration. East of the Clipper merge into Portola there is on-street parking allowed. Westbound the existing condition is two lanes with on-street parking allowed from Corbett Street to the intersection approach at Clipper. At the Clipper intersection approach, parking is discontinued, and the lanes narrow to provide two through lanes two dedicated left-turn lanes, and. There is an existing striped divider separating eastbound and westbound traffic.

  Option 1 illustrates eastbound lane narrowing and parking removal lanes to provide for a bike lane and buffer. Westbound lane narrowing and parking removal are required to provide for a bike lane and buffer. Parking along this segment in both directions is intermittent, located in between driveway curb cuts for multi-unit buildings. At the westbound approach to Burnett Avenue a lane removal would be required to accommodate the bike lane, reducing Portola from four to three lanes. There are two dedicated right turn lanes serving Clipper at the location. Option 2 illustrates east and westbound lane removal to create bike lanes with buffers.

Capacity

- *A. St. Francis to Santa Ana*: No capacity issues
- *B. Santa Ana to Santa Clara*: No capacity issues
- *C. Santa Clara to Waithman*: No capacity issues
- *D. Waithman to Sydney/Fowler*: No capacity issues
- *E. Sydney/Fowler to Twin Peaks*: Detailed capacity analysis required for both eastbound and westbound outside travel lane removals.
- *F. Twin Peaks to Clipper*: Lane removal and lane narrowing options at westbound Portola approach to Burnett Avenue needs to be analyzed for capacity impacts.

- *G. Clipper to Corbett/Market.* Lane removal needs to be analyzed for potential capacity impacts. Westbound Portola at Clipper must be analyzed for reduction in capacity

Transit

Muni operations must be carefully analyzed. Potential right side conflicts and lane narrowing, particularly in location and options with no buffer proposed, may cause Muni/bicycle conflicts. Detailed consideration of each segment and potential routes impacted is required.

Muni Routes	From	To	Service Frequency at PM Peak	Average Weekday Ridership
36	Woodside	Fowler	20 minutes	1,800
37	Corbett	Glenview	15 minutes	1,993
43*	Laguna Honda	Marine Ave	10 minutes	17,246
48	Burnett	Monterey	12 minutes	12,945
52	Burnett	Woodside	20 minutes	4,189

Parking

Quantification of proposed of on-street parking removal is required. Specific neighborhood areas impacted must be identified and potential mitigation identified. Specific areas where parking removal is required are identified above under project description.

Pedestrian Concerns

Traffic lane narrowing and lane removal would improve crossing conditions for pedestrians.

Land Use

No land use conflicts have been identified. Implementation of bike lanes on upper Portola in the vicinity of commercial land uses with large parking areas adjacent to Portola frontage should be carefully analyzed. Parking lot ingress/egress adjacent to wide outside lanes should be analyzed on a site specific basis and unique signage proposed where appropriate to alert motorists to the presence of bicyclists on Portola.

Other Departments or Agencies

None identified

Next Steps

- Capacity analysis at key intersection
- Muni operations analysis
- Quantification of parking impact where parking removal is required

1. Portola, north of Sloat, looking north. This section of Portola has on-street parking on the east side of the street, adjacent to St. Francis Wood.

2. Portola, south of Claremont, looking north.While parking is allowed, there is relativeley low demand along the east side of the street.

3. Portola, north of Santa Clara Ave.,looking north.This section is bounded by residential developments and has on-street parking.

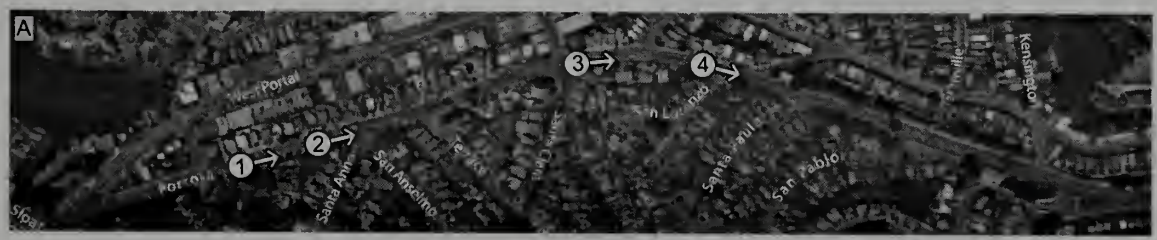
4. Portola Drive looking north. This section of Portola varies between two and three lanes of travel in each direction.

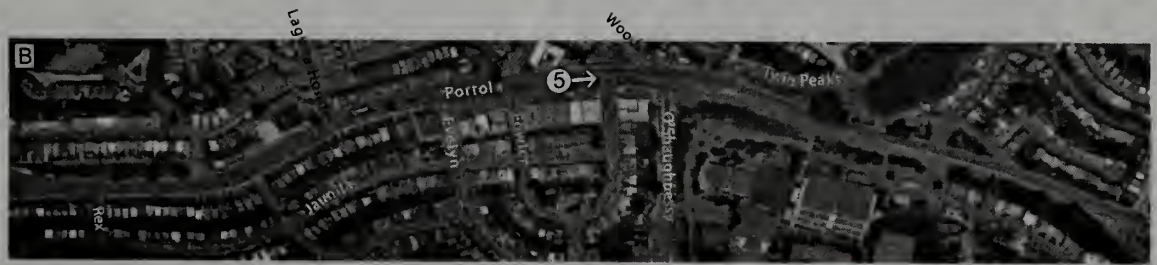
5. Portola Drive, near Woodside, looking north. This is one of the most difficult intersections along Portola, mainly due to the presence of double turn lanes.

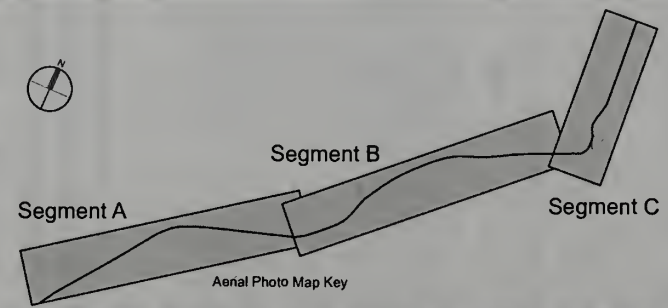
6. Portola, south of Corbett, looking south. In this section, there is a wide shoulder, but no on-street parking due to the presence of driveways.

7. Portola, just south of Corbett, looking south. Southbound cyclists from Corbett often use this short segment of wide sidewalk to access Portola.

8. As Portola turns into Market, northbound cyclists can enjoy excellent views of the San Francisco skyline. Because downhill cyclists can achieve speeds similar to motor vehicles, bicyclists can use the curb lane.







PORTOLA DRIVE

SAINT FRANCIS BLVD. TO CORBETT AVE.

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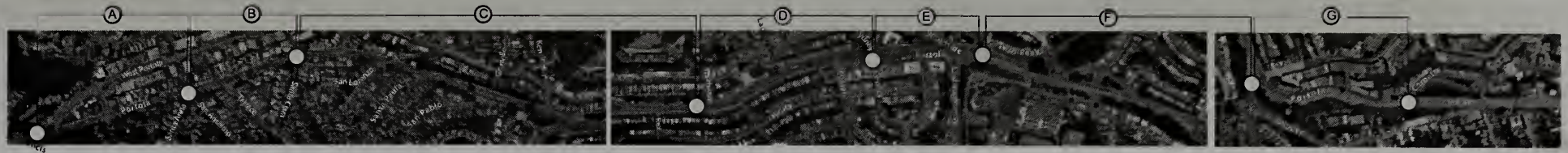
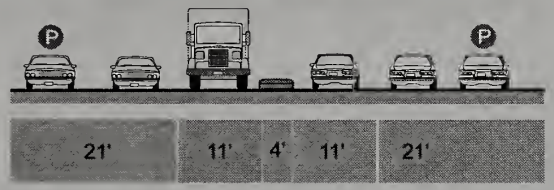
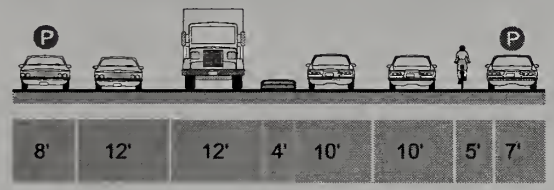
PORTOLA DRIVE (SAINT FRANCISC BOULEVARD TO CORBETT AVENUE)
EXISTING CONDITIONS (SHEET 1 OF 1)
PRELIMINARY ENGINEERING SHORT TERM PROJECT SHEETS

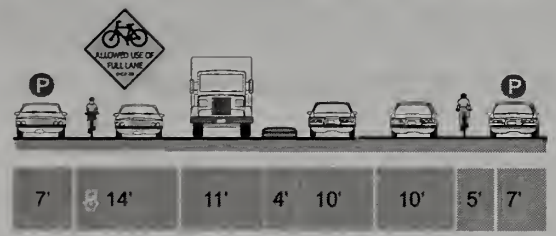


Street Cross-Sections (looking north towards Corbett)

Ⓐ Saint Francis to Santa Ana
Ⓒ Santa Clara to Waithman

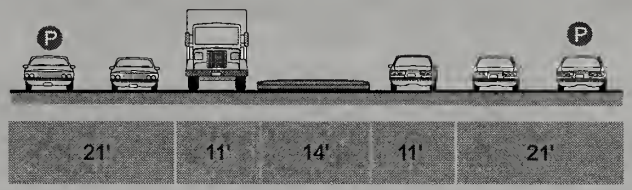


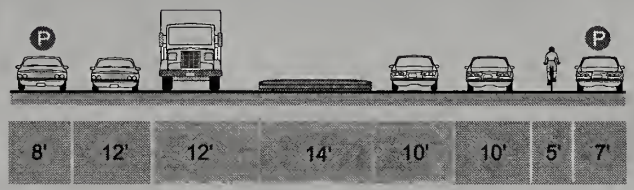


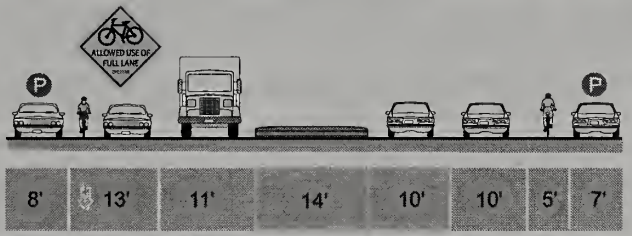


Note: The westbound downhill direction can be treated with a wide curb lane potentially including the shared use pavement stencil and "BAUFL" signage at an appropriate interval determined through further analysis of this recommendation.

Ⓑ Santa Ana to Santa Clara

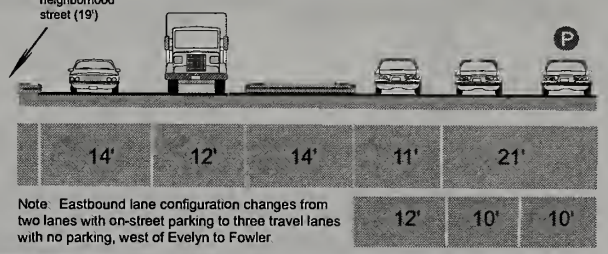




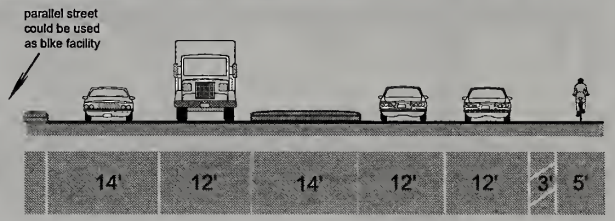


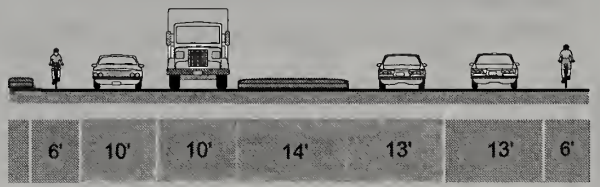
Note: The westbound downhill direction can be treated with a wide curb lane potentially including the shared use pavement stencil and "BAUFL" signage at an appropriate interval determined through further analysis of this recommendation.

Ⓓ Waithman to Sydney/Fowler



Note: Eastbound lane configuration changes from two lanes with on-street parking to three travel lanes with no parking, west of Evelyn to Fowler.





Portola Drive

Saint Francis Blvd. to Corbett Ave.

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This is a representative diagram and is not based on actual survey data.
All information presented is subject to modification.

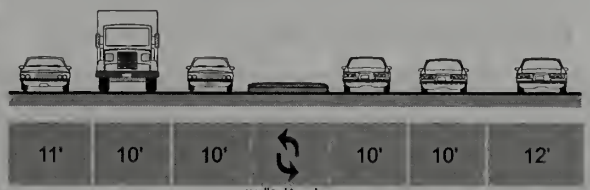
DRAFT 2/16/04

Portola Drive (Saint Francisc Boulevard to Corbett Avenue)
Cross Section Concept Sheet (Sheet 1 of 2)
Preliminary Engineering Short Term Project Sheets

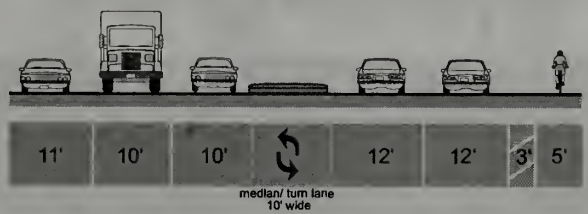
Street Cross-Sections (looking north towards Corbett)

(E) Sydney/Fowler to Twin Peaks

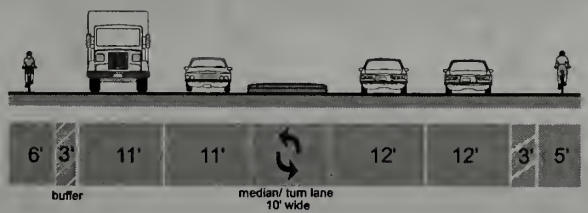
Existing



Option 1

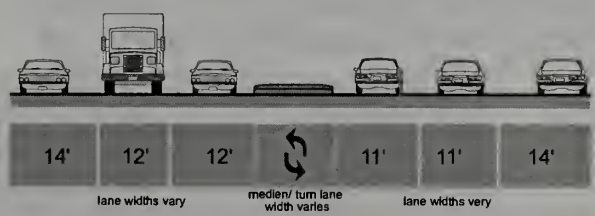


Option 2

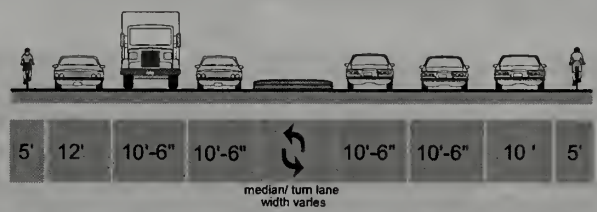


(F) Twin Peaks to Clipper

Existing

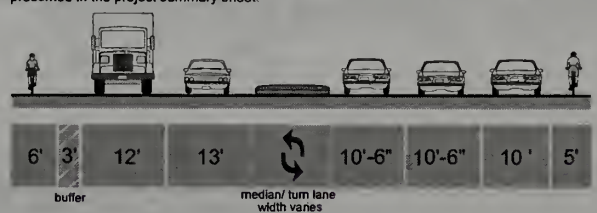


Option 1



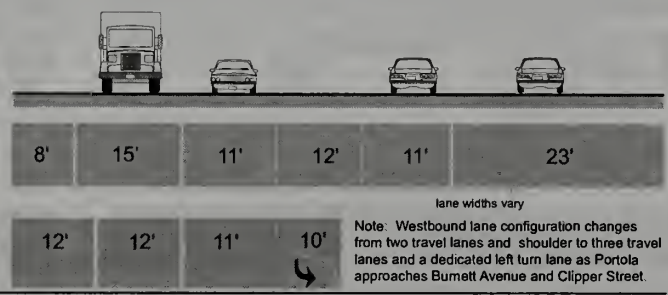
Note: The outside eastbound lane becomes a dedicated right serving Clipper Street creating a difficult lefthand merge for through bicylists travelling in an uphill direction. A design option for continuing the bicycle lane to the Portola/Clipper stop sign/pedestrian crosswalk is presented in the project summary sheet.

Option 2



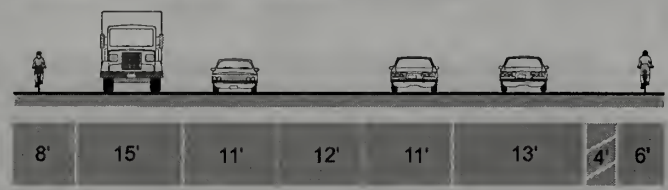
(G) Clipper to Corbett/Market

Existing



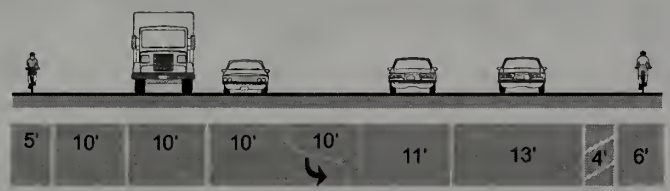
Note: Westbound lane configuration changes from two travel lanes and shoulder to three travel lanes and a dedicated left turn lane as Portola approaches Burnett Avenue and Clipper Street.

Option 1



Note: Option 1 applies only to westbound two lane with shoulder segment. Bike lane would be dropped on three and four lane approach to intersection with Burnett Avenue.

Option 2



Note: Option 2 applies only to westbound three lane and four lane segment on the approach to the Portola Drive intersection with Burnett Avenue and Clipper Street.

PORTOLA DRIVE

SAINT FRANCIS BLVD. TO CORBETT AVE.

THIS DRAFT DIAGRAM IS DESIGNED FOR PUBLIC INPUT AND DISCUSSION PURPOSES.
THIS IS A REPRESENTATIVE DIAGRAM AND IS NOT BASED ON ACTUAL SURVEY DATA.
ALL INFORMATION PRESENTED IS SUBJECT TO MODIFICATION.

DRAFT 2/16/04

PORTOLA DRIVE (SAINT FRANCISC BOULEVARD TO CORBETT AVENUE)
CROSS SECTION CONCEPT SHEET (SHEET 2 OF 2)
PRELIMINARY ENGINEERING SHORT TERM PROJECT SHEETS

SUMMARY SHEET

TOWNSEND STREET, EIGHTH TO EMBARCADERO

Project Description

Townsend Street is moderate-volume roadway in the northeastern part of San Francisco. Townsend provides an important connection between existing bike lanes on 8th Street, Division Street, and the Embarcadero. It provides access to Pacific Bell Park. There are also plans to construct a bike rental/storage facility at the Caltrain Depot at the corner of Townsend Street and 4th Street. This will increase the importance of this corridor to the city's cyclists. Currently, Townsend Street has wide curb lanes between 8th Street and 3rd Street. The curb-to-curb widths and striping configuration vary along the street.

History/Background

The 1997 Bicycle Plan calls for bicycle lanes on Townsend Street from Division to Third Streets. There is some concern that portions of Townsend Street are not an "accepted street" (a street built to city standards), but this does not preclude striping improvements to the street. Changes related to the Mission Bay Development are taking place on Townsend Street around 3rd Street. Also, some striping changes on Townsend Street at 3rd Street have been made recently to facilitate left turns for Muni. Along the southside of Townsend Street, wheel blocks were installed two years ago so that there is a space for pedestrians to walk between the angled parking and Caltrain property. In addition, the Mission Creek Bikeway concept calls for the development of a linear park with multi-use trail provisions along the southeast side of Townsend Street.

Design Segments

- 8th St. to 7th St: reduce width of travel lanes to 12' to provide bike lanes and stripe bike lanes to avoid RR tracks on east side.
- 7th St. to 4th St.: reduce width of travel lanes to 11', convert perpendicular parking to back-in angled parking or convert diagonal parking to parallel parking to provide bike lanes (parking conversion from perpendicular to diagonal or diagonal to parallel will result in loss of approximately 30% of spaces, equal to approximately 50 spaces. A pedestrian sidewalk could be provided if both perpendicular and diagonal parking orientations are "downgraded" (perpendicular to diagonal, diagonal to parallel). There is potential for a two-way path on the east side of the street between parking and Caltrain property. This would connect with the existing 12' wide sidewalk at Caltrain facility to the north. The design of the transition to the south would need to be considered.
- 4th St to 2nd St: provide room for bike lanes by eliminating one lane of travel and providing a two-way center turn lane. Maximum available width should be provided to the parking/bike lane, requiring that the center turn lane be as narrow as is permissible given local traffic conditions.
- 2nd to Embarcardero: retain striping and geometry. Sign and mark as bike boulevard (shared lane). Back-in angle parking should be considered in order to provide consistency along the corridor and to maximize safety for bicyclists.

Capacity

- The designs for this street call for the removal of travel lanes between 4th and 2nd Streets, requiring further study of the impact of travel lane reductions on traffic operations on Townsend Street and intersecting streets be studied further.
- **The DPT has recently acquired traffic counts at 2nd and 3rd Streets. These counts will be integrated into the traffic analysis.**

Parking

- Currently parking exists along most of the street, but varies between parallel, perpendicular, and diagonal configurations. Between 8th and 7th, parallel parking exists on the west side while parking is restricted/limited on the east side of the street. Between 7th and 4th, there is perpendicular parking on the west side and diagonal parking on the east side (long-term and 2-hour). Between 4th and 2nd, there is parallel parking on both sides of the street, and between 2nd and Embarcadero, there is diagonal parking on both sides.
- To provide room for bike lanes, some on-street parking will need to be reconfigured between 7th and 4th. Perpendicular parking should be converted to back-in angled parking or diagonal parking converted to parallel parking to provide bike lanes (parking conversion from perpendicular to diagonal or diagonal to parallel will result in loss of approximately 30% of spaces). This will result in the reduction in about 50 spaces. Currently, there appears to be an adequate supply of parking.
- However, new development along the street may create additional demand for on-street parking. Also, where diagonal parking is used, it is recommended that the spaces be oriented for back-in diagonal, which allows for greater visibility of cyclists from drivers parked in the parking stalls.
- **The supply of parking and curb space has been inventoried by the SFBC. These counts will be incorporated into the analysis of options.**

Transit

- MUNI operates several bus lines on Townsend, but bus service will not be affected on most of Townsend. Bus service may be delayed on the section of Townsend, between 4th and 2nd, because of the reduction of a travel lane. The following specific considerations must be addressed:
    - Layover locations for the 30-Stockton and the 45-Union Stockton are located between 4th and 3rd, requiring adequate parking lane width to accommodate 8.5-foot wide buses, without encroachment of buses into the proposed bike lane.
    - The 30, 45 and 15-Third and other lines (see table below) turn left from Townsend Street onto Third Street. These are high frequency and high ridership lines that may be impacted by changes in lane configuration and cross traffic. Future traffic volumes at this location will likely increase with more development of Mission Bay requiring that the street configuration be evaluated carefully to ensure continued reliability of MUNI service.

Bus Route	From	To	Service Frequency At PM Peak
19	8th	7th	10 minutes
10	8th	2nd	10 minutes

47	5th	4th	7 minutes
16AX/16BX	5th	4th	15 minutes
30	4th	3rd	5 minutes
45	4th	3rd	8 minutes
15	4th	3rd	7 minutes
80X/81X/82X	4th	Embarcadero	Scheduled to meet Caltrain

Pedestrian Concerns

- The proposed bicycle improvement benefit pedestrians by decreasing the effective crossing distance across Townsend. While the curb-to-curb distance will remain constant, the number of travel lanes will be reduced, so crossing at signalized or unprotected crosswalks will be simplified.
- However, since no sidewalk exists between 7th and 4th, there may be conflicts between cyclists and pedestrians that are walking in the bike lane. Option 2 creates designated sidewalk space to reduce conflicts with pedestrians in the bike lane. Sidewalks would increase pedestrian safety and comfort.

Land Use

- Along Townsend, the uses vary between office, light industrial, retail, and residential. The industrial uses have historically been served by the freight railroad line that exists on Townsend between 8th and 7th. If the Caltrain rail on the street remains, this may conflict with the installation of a northbound bicycle lane.
- There are many loading docks on this segment of Townsend Street that must be considered in the final bike lane design and signage. All current land use options in Eastern Neighborhoods rezoning maintain some form of industrial zoning along Townsend.

Other Departments or Agencies

- Caltrain: The construction of a northbound path along Caltrain property between 7th and 4th should be coordinated with Caltrain.
- Muni should be involved with the development of plans on Townsend Street that may affect their service.
- The Planning Department should be involved in the further development of this project to ensure that pedestrian needs are accommodated in the final project design.

Next Steps

- Capacity analyses associated with the travel lane reduction between 4th and 2nd should be conducted by DPT.
- Potential mitigation for parking loss should be identified.

TOWNSEND ST REET (EIGHTH TO E MBARCADERO)
San F rancisco Bicycle Master P lan Update
Preliminary Engineering Priority Project Sheets

SAN FRANCISCO
DEPARTMENT OF PARKING & TRAFFIC
SFPT

alta
PLANNING + DESIGN

1. View of Townsend St. from the traffic circle at 8th/Division/Henry Adams. Townsend connects to existing bike lanes on Division and 8th to the south and west.

2. Bicyclist riding northeast on Townsend between 8th and 7th. Note the railroad tracks on the east side of the street and the parallel parking on the west side.

3. Looking NE at the 7th St. intersection. The RR tracks veer off of Townsend towards the Caltrain Yards. This segment is striped for diagonal parking on the east side and perpendicular parking on the west side of the street.

4. Looking SW along Townsend, between 5th and 6th. This segment is also striped for diagonal parking on the east side and perpendicular parking on the west side of the street - low parking turnover.

5. View of the informal walkway on the east side of the street between 5th and 4th, near the Caltrain Depot.

6. View of the 4th St. intersection, looking north. Note bus zones new construction, and overhead wires.

7. Looking SW on Townsend between 3rd and 2nd. Note overhead electrical wires for buses. Two lanes of travel and parallel parking in each direction.

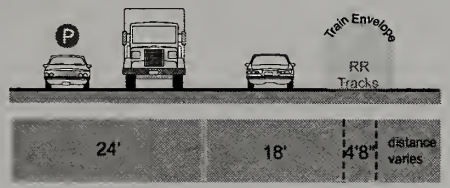
8. Looking SW from Embarcadero, this two lane road curves between new residential development. This segment contains diagonal parking on both sides. Relatively low vehicular travel speeds.

Existing Conditions Data

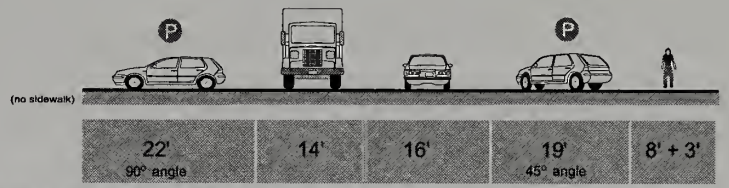
Street Cross-Sections (looking northeast towards The Embarcadero)

Existing

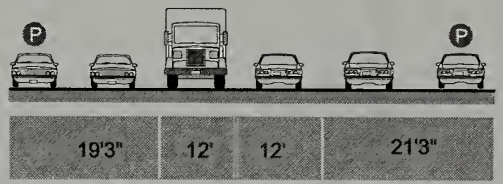
A 8th St. to 7th St.



B 7th St. to 4th St.

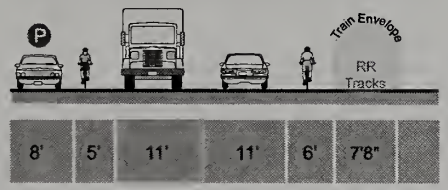


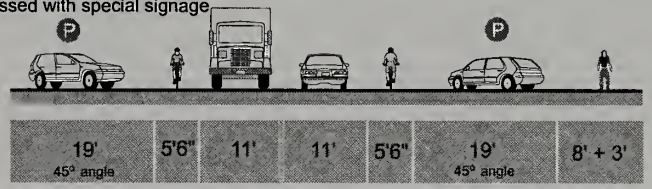
C 4th St. to 2nd St.

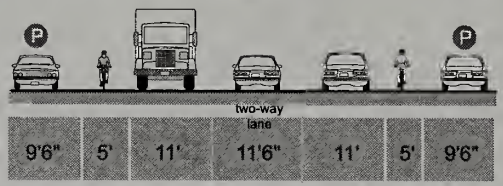


loading dock conflicts will need to be addressed with special signage

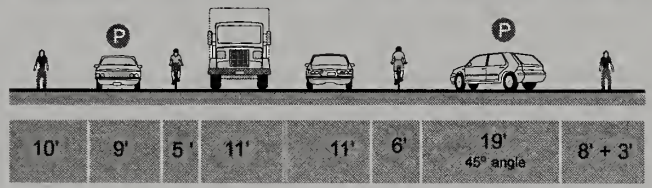
Option 1



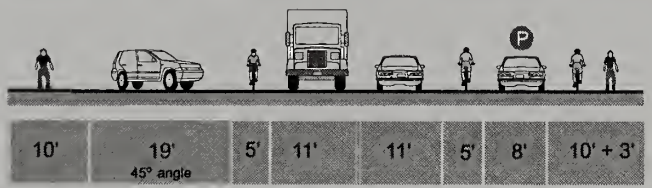




Option 2



Option 3



BIKE PLAN UPDATE

Townsend Street

Eight to Second Street

This draft diagram is designed for public input and discussion purposes.
This is a representative diagram and is not based on actual survey data.
All information presented in this diagram is subject to modification.

DRAFT 11/26/03

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Townsend Street (Eighth to Second) Cross-Section Concept Sheet
San Francisco Bicycle Plan Update
Preliminary Engineering Priority Project Sheets

SFDPT

APPENDIX

b. SFBC Outreach Summary

2nd Street Feedback Summary

SFBC 6/13/2004

Total: 71 comments

Support Opt. A	Support Opt. B	Support Either	Oppose or No Comment
28	3	38	2

Extensive outreach was done on Second St. All of the accessible businesses received a packet of information including summary sheets, diagrams, FAQ, Info Guide, and comment cards. Two presentations were made to neighborhood groups on the 2nd St. proposals.

Second St. received a great deal of support from a variety of contacts. In general, both neighbors and businesses support some kind of bike improvement.

A major concern from both supporters and opponents of the bike lanes is the need to address the freeway at both Harrison and Bryant.

In total 69 people support the Second St. bike lanes. While the majority of them were not specific about which design they liked best, 28 supported option I, which would provide bike lanes in both directions.

A typical comment in support of option I:

> "I strongly support option 1 for all of 2nd Street. I want bike lanes both ways all the way from Market to King. . .particularly around the Harrison St. intersection with the freeway ramps."

Only 3 people explicitly supported option 2. But this comment sums up the concerns:

> " Option 2 looks best, one bike lane on this relatively narrow street seems adequate. Option 1 would create even more gridlock during rush hour."

The majority of the people who commented just supported bike lanes. Their comments looked like this:

"I think it's a good idea. I'd like to bike here, but I know it's too dangerous."

Only two people opposed Second St. outright. Their comments looked like this:

"Having only one lane will force busses and all non-bridge traffic into the single lane, turning what is already a very bad situation into a nightmare."

Presentations were given to Alliance for a Better District 6 and the SOMA Planning Council. Follow-up is still in progress.

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

5th Street Feedback Summary

SFBC 6/13/04

Total: 66 comments

General Support of Improvements	Support Opt. 1	Support Opt. 2	Oppose	No Comment or Non-sequitur
14	In General: 25	In General: 7	2	6
Specific Support:	Specific:	Specific:		
40	a. 7 b. 6 c. 7 d. 8	a. 1 b. 2 c. 1		

Extensive outreach was done on Fifth St. All of the accessible businesses received a packet of information including summary sheets, diagrams, FAQ, Info Guide and comment cards. Four neighborhood groups or major

downtown stakeholders received presentations on the Fifth Street proposals, including the SOMA Planning Council, Alliance for a Better District 6, Forest City Development, and the Community Business Partnership. We are following up with the the Planning Council and the Alliance for letters of support. The Community Business Partnership has already sent in its letter of opposition.

Fifth Street received strong support from both neighbors and cyclists. Businesses had more mixed support. In particular, the Business Partnership, which represents 20 businesses on or around Fifth Street, had major concerns about reducing capacity on Fifth Street. They would like to see the road accessible to all users but ultimately, they want car traffic to be prioritized as well as have the intersections further studied. As a representative from the Downtown Parking Corporation put it:

"We favor option two for the following reasons: it does not reduce capacity…and it will not create a significant safety hazard for the bicyclists."

In total 40 people support the Fifth St. bike lanes. 20 people specifically supported option 1, which called for bike lanes on both sides of the street for the length of Fifth Street and seven people supported option 2.

People who were in favor of option 1 often said things like:

"I prefer option 1 because it provides bikes lanes the full length in both directions for safety."

Seven people supported Option 2 for Fifth St. They said things like:

" I'm in favor of option 2 because I feel that reducing the lanes of auto traffic will have the additional effect of traffic calming similar to the way bike lanes of Valencia St. removed

auto traffic lanes and slowed down traffic, shifting auto traffic to Guerrero/Dolores."

Only two individuals came out against the choice of Fifth Street and 7 people either had no opinion or had comments that weren't relevant to the street designs.

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

14th Street Feedback Summary

SFBC 6/13/04

Total: 97 comments

Support Opt. A	Support Opt. B	Support Either	Oppose or No Comment
17	44	30	6

Outreach on 14th Street included street side tabling, flyers to all residences and door-to-door merchant outreach. All businesses on 14th and nearby businesses on Market Street received information packets including summary sheets, diagrams, FAQ, Info Guide, and comment cards. Neighborhood presentations are still in progress.

The range of comments for 14th Street were more narrow than some other streets, with more specific input on the designs themselves. The bulk of the comments were focused on support for some type of bicycle improvement. However, there were a few comments that were either opposed or had no suggestion whatsoever. Of the 95 people who submitted comments, 90 people supported some kind of improvement on 14th.

30 people added their support with no preference for options A or B. Overall, their comments focused on the need for something to be changed. A comment that summed up the over feeling of this group is:

"Would love to see more bike lanes. One way would be safer

for bikes, but eliminating a two way street would be tough for drivers."

17 people explicitly supported option A. Many of the comments did not explain their support. However, the overall feeling was that it would have less negative impact on cars. This is echoed by the two businesses that gave comments on the proposals.
A typical comment was:

"Option A- probably easier to keep 2-way for residents to turn left."

Option B received the most support with 43 people in favor it. People tended to cite the need to both connect the bike lane and address parking. One standard comment being:

"I support design option B- 14th turns into 1-way at Dolores anyway. Prefer optional parking configuration- bike lanes on curb are safer, and it affords more parking."

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

17th Street Feedback Summary

SFBC 6/13/04

Total: 53 comments

Support 17th	Support Option 1	Support Option 2	Support Option 3
14	General: 8	General: O	1
	Specific Support	Specific Support	
	a. 8 b. 4 c. 4	a. 3 b. 6 c. 5	
Support 16th	Support of Corridor Improvements	Bike Lanes on 16th & 17th	Support 18th
7	5	4	2

There is still a great deal of outreach to be done on 17th St.., as the SFBC received diagrams late in the process. Door to door outreach and meetings with major stakeholders are in progress.

As for the individual comments, many people had specific feedback about the changes they'd like to see happen for the corridor. Half of people who commented supported 17th and option 1 the length of the street. The other half was divided between wanting bike lanes on 16th, along anything through the corridor, bike lanes on 18th, or a bike lane in one direction on both 16th and 17th.

Many of the supporters of bike lanes on 17th St. wanted wider bike lanes. A typical comment:

> "If you (DPT) want to leave 16th St for cars & buses, give us a good route on 17th! Narrow the car lanes to 9 feet & put in bike lanes. Colored bike lanes!"

A typical comment for creating bike lanes on both 16th and 17th:

> "I suggest that you consider the idea of using BOTH STREETS ...with a bike lane in ONE DIRECTION on one of the two streets and a bike lane going THE OTHER DIRECTION on the second street."

Many people preferred bike lanes on 16th Street, but were resigned to 17th if significant improvements were made. A typical comment:

> "If there would be no way for a bike lane on 16th, then driving for cars on 17th should be very uncomfortable, so that the cars are forced to go on 16th."

Please see attached raw comments from neighbors and bicyclists.

#

19th Ave/SFSU Feedback Summary

SFBC 6/13/04

Total: 7 comments

Total 19th Avenue Support	Support Opt. 1	Support Opt. 2	Oppose
7	0	5	0

There is still a great deal of outreach to be done on 19th Ave. A meeting to discuss the plans with SFSU is being re-scheduled. The comments included here came from Bike to Work Day and Earth Day tabling events at SFSU, as well as, comments from the April 21st Feedback Workshop.

All of the participants supported bike improvements. One person gave the very general comment of, " Bike lanes would be great." Others gave very specific feedback.

For the most part people supported option 2. As one participant put it:

> "Option 2 appears to work best for casual riders."

Other suggestions were also made:

> "One alternative not considered is the elimination of parking on the 19th Avenue segment. While this might require Caltrans approval, it would not impact private property access, and would probably be the least costly of alternatives."

Please see attached raw comments from neighbors and bicyclists.

#

Alemany Boulevard Feedback Summary

SFBC 6/13/04

Total: 54 individual comments

Support	Maybe	Opposed	No Comment
42	3	7	2

Alemany Boulevard received wide support from individuals and mixed reviews from neighborhood groups. There are few businesses on Alemany. Because of Alemany's residential nature, it serves as a commute thoroughfare and people both in support of and opposed to the project have concerns about how the flow of traffic will be affected at intersections.

Seven major neighborhood groups that surround Alemany Blvd. received presentations. Only one group formally opposed the project, the Outer Mission Residents. Many groups were evenly divided within their membership. Members either felt that bike lanes were good because they slowed traffic and would help with safety, or they felt that all cyclists broke the law and that bike lanes would make traffic worse.

Comments from individuals took distinct sides. Three people commented that they would only support the bike lanes if it didn't have drastic impacts on car traffic or safety. A typical comment from them was:

"If two lanes on Alemany will reduce traffic speed on the street works out, then I'm all for it."

The seven individuals who opposed the proposal tended to feel that car traffic would worsen with the loss of a car lane. Their comments looked like this:

"Eliminating 2 lanes would not result in traffic calming, it would only make congestion worse and result in more

accidents as people try to make up for lost time getting to
work."

However, 42 people strongly supported the project. Half of those who commented in support are non-cyclist neighbors. The support comments are best summed up by this neighbor:

"Alemany will be a great cross city connection. The re-striping
will be a great opportunity to improve pedestrian safety and
add greenery back to the median!"

One or more presentations about the Alemany Blvd. proposals were made to the following groups:

New Mission Terrace Neighborhood Association, Outer Mission Residents Association, Ingleside Terraces Homes Association, Cayuga Improvement Association, Excelsior District Improvement Association, Aide to District 11 Board of Supervisors, District 11 Council, Excelsior Action Group, and LISC.

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

Bayshore Boulevard Feedback Summary

SFBC 6/13/04

Total: 22 individual comments

Option 1				
A	**B**	**C**	**D**	**E**
11	**1**	**6**	**3**	**1**
Option 2				
Support Only	**B**	**C**	**D**	**E**
6	**11**	**4**	**7**	**8**

Outreach work on Bayshore Boulevard is in progress. Two neighborhood groups received presentations, both with mixed support from members.

Overall, Option two received the most support. The general sentiment is summed up by this comment:

" I ride Bayshore often to get to and from work in South
San Francisco and find that the speed of traffic is really way
too fast. I recommend removing a lane of traffic over removal
of parking to make room for bikes. I figure, the freeway is
right there, if people want to drive fast they should get on that!"

Presentations were made to the Bayview Hill Neighborhood Association, Friends of McLaren Park and the office of Supervisor Sophie Maxwell.

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

Broadway Tunnel Feedback Summary

SFBC 6/13/04

Total: 24 comments

Support	Opt. 1	Opt. 2	Opt. 3	Opt. 4	No comment
23 4 with no specific option	6	1	4	10	1

Because the designs were not available until the end of March, outreach on the proposed designs only included the community workshop and on-line feedback. These comments were gathered from 3/31/04 until

5/25/04. Five stakeholder groups received presentations. Continued outreach is in progress.

Comments from participants reflect a concern regarding money and time. Many people voted for option 4 but voiced their concern about funding.

Presentations were made to the following stakeholder groups:
Aaron Peskin of the Board of Supervisors, Telegraph Hill Dwellers, SPUR (San Francisco Planning and Urban Research Association), North Beach Citizens, and Bartol Alley Neighborhood Group.

#

Cesar Chavez / 26th Street Feedback Summary

SFBC 6/13/2004

Total: 169 comments

Total Cesar Chavez Support	Support 26th	Support Either	Only Oppose Cesar Chavez
88	54 15 for 26th because they oppose Cesar Chavez	10	12

There is a range of five types of comments for the Cesar Chavez/ 26th corridor consisting of:
support for either Cesar Chavez or 26th, strong support for Cesar Chavez, strong support for 26th St., or opposition to Cesar Chavez.

One major concern is the effects that Cesar Chavez would have on Precita. 27 people responded from the Precita neighborhood (primarily through form emails). Their main concern focused on potential traffic diversion onto Precita. They either supported 26th St. or just opposed Cesar Chavez.

88 people strongly supported Cesar Chavez. While most of the comments were not specific about whether they supported option 1 or option 2, of the people who did comment on options only 2 people supported option 2.

A typical comment in support of Cesar Chavez:

"Please, we need to have bicycle lanes on Ceasar Chavez!
They will serve many purposes: connecting our neighborhood
to the other bike lanes in the rest of the city,
reduce collisions
and make the neighborhood more bicycle and pedestrian safe."

54 people strongly supported 26th Street. They tended to respond by saying that bike lanes on Cesar Chavez would be dangerous and that 26th would be safest for bicyclist.

A typical comment for 26th Street.:

"I support the 26th Street bike boulevard. I'd like to slow traffic down
on Cesar Chavez, but don't want traffic to flow onto Precita. Unfortunately,
Cesar Chavez is a main artery in and out of the city."

The two far ends of the spectrum were people who were either for both or against Cesar Chavez.

A typical comment in support of either Cesar Chavez or 26th Street:

"I like some change in this corridor. 26th bike blvd is my preference but I would be concerned if that was done without combining it with
traffic calming on some of the side streets. On the Chavez option,
I prefer option one, I like the median."

A typical comment against Cesar Chavez:

"As a Bernal Heights resident (21years) frequent user of Cesar Chavez
Ave and city bicyclist, I strongly oppose reducing lanes on Chavez to
accommodate cyclists. Chavez is a motor vehicle conduit, purely and

simply, by every criterion."

Presentations were made to the following neighborhood groups: Precita Valley Neighbors, Bernal Heights Community Center, Friends of Rolph Playground, and South Cesar Chavez Neighbors (SOCECHA).

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

Fell/Masonic Intersection Feedback Summary

SFBC 6/13/04

Total: 84 comments

Total Fell/Masonic Support	Support Opt. A	Support Opt. B	Support Opt. C	Oppose or No comment
80	3	15	31	4

The Fell/Masonic intersection received some of the most detailed feedback of all the projects. This feedback reflects comments gathered during street side tabling, neighborhood meetings, online comments, and the feedback workshops. They were gathered from 2/18/04 to 5/28/04. The outreach focus has been on neighborhood groups and individuals.

In general, there is support from all kinds of users to improve the intersection. Very few comments seemed to be a hundred percent behind one of the options. People often chose an option and then added extra improvements they would like to see with it.. Many of the participants looked at the intersection from multiple perspectives. In particular, people had concerns about the impact on pedestrians. As one participant said:

" All options are better than the status quo. The most

important change would be to give peds and bikes a head

start with the signals. Also, when crossing Fell and Oak as

a ped, the lights change too quickly form green to red
without a safety buffer."

The least popular of the options was option A. The general feeling of those comments was that any improvement would be good improvement. As one person put it:

" Option A would meet my needs for this intersection
regarding the panhandle path."

Option B was the second highest ranked option for people who gave specific feedback. People who supported Option B tended to feel this way:

"Option B sounds like a good one to me. I like the idea of
safe hit posts as they will slow down the motorists who cut
the corner and turn from Fell onto Masonic very fast!"

By far, Option C was the most popular. Many people felt that Option C was the best for all parties involved. As one person said:

" Option C is best. It feels the safest. The left turn is where
the most danger comes from (rather than the traffic on Masonic)."

Eight neighborhood groups and key stakeholder groups were met with including: NOPNA, the Urban School, Stanyan Fulton Association, Friends of Rec and Park, Panhandle Residents Organization Stanyan Fulton, Five Together, and Haight Ashbury Neighborhood Council. Most groups support general improvements for the intersection. Both the North of Panhandle Neighborhood Association and the Urban School support the plans. Other groups are split on their support but are in the process of being followed up with.

Please see attached raw comments from neighbors, bicyclists and civic groups.

#

Illinois Street Feedback Summary
SFBC 6/13/04

Total: 27 comments

Total Illinois Support	Support Opt. 1	Support Opt. 2	Oppose or No comment
21 total	a. 7 b. 6 c. 3 d. 5 e. 5 f. 5 g. 4 h. 4	a. 1 b. 4 c. 5 d. 3 e. 3	3 oppose 3 non sequiturs

Illinois Street is a mixed land-use street, including retail businesses, live-work units, and small businesses. Major stakeholders include not only businesses and neighbors but the Port as well. The Dogpatch neighbors, Potrero Boosters, Bayview Hill Neighbors, The Port, and the India Basin Coalition were all given presentations of the proposals. The Dogpatch and India Basin neighbors will write letters of endorsement. There is no formal opposition among the neighborhood groups, however the Dogpatch neighbors would like Indiana to also be considered.

All of the accessible businesses received packets of information including summary sheets, diagrams, FAQ, Info Guide, and comment cards. Additional meetings were held with the Port, including discussions about public access on the bridge. Our outreach demonstrated mixed support for the bridge itself, but support for bike lanes along the length of Illinois (including the bridge).

Only two businesses submitted comments so far (it should be noted that the SFBC was not permitted to enter several large buildings that contain many small businesses). These two businesses were equally split. Their major concerns are parking and cyclist safety on a truck route. These concerns were echoed by the three people who oppose the improvements to Illinois. A typical comment:

"Illinois is a bad street for bikes, traffic much too high for bikes. Indiana is much better. Less traffic connects with 4th …"

Overall, more people supported option 1 on the whole. Their comments looked like:

"Love option 1 (new bridge with bike access) linking Cargo Way provides a comprehensive alternative to Third Street."

People who preferred option 2 tended to be more pedestrian minded and commented on the need for sidewalks. As this participant put it:

"I prefer wider sidewalks and fewer parking spaces. Sidewalks throughout are very important. Better to have parallel parking than no parking. Buffer for pedestrians."

Due to the limited access to businesses along Illinois Street, the SFBC posted many flyers along the length of the street promoting the workshops and design proposals.

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

Laguna Honda Intersection Feedback Summary

SFBC 6/13/2004

Total: 23 comments

Support Some Kind of Improvement	Option 1	Option 2	Oppose/ No Comment
20	5	1	2 Opposed 1 No Comment

Outreach around the Laguna Honda intersection is in progress, as the SFBC received the designs late in the process. The comments included here were collected from 4/21 - 5/25. These were gathered at the April 21st Feedback Workshop, streetside tabling at the intersection on Bike to Work Day, and from on-line comment forms.

Many Laguna Honda neighbors attended the April workshop and there is some opposition from a neighborhood group concerned about removing the left turn pocket. They would like to see bikes but don't feel that the designs proposed are the best alternatives.

Many people gave general support such as:

" I ride through here all the time and I love the proposed changes."

People who chose an option preferred option 1, with the left turn for bikes:

"Yes to option1. Create left-turn bicycle lane on Laguna Honda to Woodside.
It will really help bikes navigate that scary intersection."

Major stakeholders such as the Laguna Honda Hospital and Walk SF need to be met with again.
Please see attached raw comments from neighbors, bicyclists and civic groups.

#

Upper Market Feedback Summary

SFBC 6/4/2004

Total: 75 comments

Support Some Kind of Improvement	Support Typical 1	Support Typical 2	Support Typical 3	Oppose / Non Sequitur
12	A. 14 B. 16 C. 17	D. 11 E. 36	F. 10 G. 28	3 Opposed 4 Non Sequitur

These comments were collected from 4/14-5/25. The majority of the comments were collected at the feedback workshops,

streetside tabling, merchant outreach and Bike to Work Day events.

Merchant outreach is in-progress. Fifteen businesses have been formally met with and they are split in their support, due to potential for parking removal. The Upper Market Merchants Association strongly opposes removal of parking.

Most individual comments included very specific preferences for each option. A popular combination was "C, E, G." As one person put it:

> " Please implement option C, Option E, and Option G. If you remove parking, you will encourage people to take public transportation, walk and ride their bikes. As fewer people drive, the area will become even more popular with pedestrians. "

People who supported bike channels felt that they added an extra safety buffer.

> "I think the bike channels are a great idea. The help newer cyclists to understand where the best place to ride is (pass right turning cars on the left, for example)."

Support from businesses was mixed, as evidenced by these comments from merchants:

> "RE: Typical 2 we prefer E (removing parking). This will improve the safety for bicyclists and improve Market Street for Everyone."

> "We would like to see the extension of bike lanes but w/o the removal of existing parking spaces."

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups.

#

Masonic Street Feedback Summary

SFBC 6/13/04

Total: 53 participant comments

Total Masonic Support	Support Opt. 1	Support Opt. 2	Support Opt. 3	Oppose/ Non-Sequitur
49	General: 19	General: 2	General: 6	Oppose: 3 N/S: 1
	Specific:	Specific:	Specific:	
	a. 4 b. 1 c. 2 d. 2 e. 3	a. 0 b. 4 c. 3 d. 2 e. 1	a. 0 b. 0 c. 0 d. 0 e. 0	

Overall, the proposed changes for Masonic were widely supported. 49 participants supported bicycle improvements. Neighborhood presentations were given to Hayes Valley Neighborhood Association (HANC), NOPNA, and Hayes Valley Neighborhood Association. There was also street side tabling at the NOPNA street fair and along the Panhandle.

People who oppose the lanes are primarily concerned with the speed of traffic and the removal of any parking. As one participant said:

"No parking removal. It is already a nightmare to come home
after about 7pm and find parking in this area."

Option 1 was the most preferred by participants. The idea of a permanent space for bikes was mentioned in almost every comment. For example:

" Option 1 seems good- preserves bike lanes 24 hours. Also

Allows huge bike lane when buses are not present during peak
times."

Option 2 seemed to be preferred by people who wanted to move more with the flow of traffic.

> "Option 2 would be optimal for me, as I think a dedicated bike
> lane going up hill will be good for bikers and also for people who
> want to keep the parking spots. I go slower up and if I have to share
> the lane, I'll be more scared and may use the sidewalk, which is not good!"

Option 3 was supported by people who felt it was a good compromise.

> " I feel that a combination bike/bus lane is the best approach for all section. I wonder why it's not possible to have a ten foot bus lane that can also be used by bikes especially since the 43 runs ever 10 minutes most of the time."

Please see attached raw comments from neighbors, bicyclists and civic groups.

#

Oakdale Ave Feedback Summary

SFBC 6/13/2004

Total: 13 comments

Support	Oppose
13	0

Oakdale Avenue received most of its comments from the Bayview feedback workshop. All of the businesses received outreach materials including summary sheets, diagrams, FAQ, Info Guide and comment cards. Most businesses weren't opposed to bike lanes but they were opposed to the removal of parking, particularly the businesses closer to Bayshore Blvd.

Presentations were made to the Bayview Hill Neighbors and India Basin Neighbors, both support the Oakdale bike lanes. India Basin will write a letter of support.

Because the bulk of the comments were received at the workshop, they tended to support the bike lanes. However, a big concern raised was the relationship of the Oakdale bike lanes to Bayshore Blvd. In particular, making a left turn onto Bayshore Blvd.

A typical comment looked like:

> "How can we connect from Bayshore to Loomis ? It is important to connect up. Also under I-280 is a problem spot."

Please see attached raw comments from neighbors, bicyclists, business contacts and civic groups.

#

Polk Street Feedback Summary

SFBC 6/13/04

Total: 32 comments

Support	Oppose
31	1

There is little feedback at this time on Polk. Because it was one of the last projects received by the SFBC, there is still outreach to be done including re-scheduling meetings with Fox Plaza and the North of Market Planning Coalition. One group has been met with specifically about Polk proposals: the Tenderloin Development Corporation and it has not taken a position on the designs.

The feedback from participants was extremely supportive. However, many people also suggested that the left turn from Market onto Polk be addressed. As one person put it:

> "Way to go! Let's make it happen - - only suggestion is a

clear, easy way for bikes going East on Market to make a
left turn on Polk St."

Several people also wanted more secure barriers or visual clues for drivers. A typical comment:

"I strongly support the contra-flow bike lane. The safe-hit posts are very important since there are no contra-flows in SF now. Also, I want colored bike lanes for added safety."

Please see attached raw comments from neighbors, bicyclists and civic groups.

#

Portola Drive Feedback Summary

SFBC 6/13/2004

Total: 12 comments

Support Portola	Oppose
10	2

To date, there has been limited outreach on Portola, as the SFBC only recently received the designs. Comments were gathered from 3/27 - 5/27. A presentation was made to the West Portal Ave. Association, who are in support of the proposal.

The speed of traffic and traffic predictability is a concern for both cyclists and neighbors. People who opposed the lane were opposed to both the removal of parking and cyclist riding behavior.

Cyclists tended to support a general improvement. Two comments recommended installing a bike path due to the excessive speed of cars along this corridor. There was also a feeling of concern particularly around the Woodside segments.

" The segments F & G from Woodside to Portola should be rethought.

The steepness of the approaches means that very few people will use this. As Prop K has enabled $455 M to bicycles, a more appropriate strategy (such as wider roadways or bike paths) should be considered."

Please see attached raw comments from neighbors, bicyclists and civic groups.

#

Townsend Street Feedback Summary

SFBC 6/13/04

Total: 46 comments

Total Support	Support Opt. 1	Support Opt. 2	Support Opt. 3	Oppose/ Non sequitur
42	2	15	10	4

Townsend is a popular street for commuters both downtown and those heading down the peninsula. Because of its proximity to Caltrain there are a number of concerns about parking access and the way current parking affects bicycles.

All of the accessible businesses on Townsend received packets of information including summary sheets, diagrams, FAQ, Info Guide, and comment cards. Seven businesses gave positive feed back. As this business put it:

" I would love to bike lanes on Townsend. Many of our employees bike to work and our part of Townsend, as it exists, is treacherous."

All of the individuals who commented supported some kind of bicycle improvement and acknowledged the need for a sidewalk on the street. Most feedback was in regards to Section B, from 7th to 4th streets. 15 people supported option 2. A standard comments was:

"I like option 2 as being more bike and pedestrian friendly."

The 10 people who supported option 3 tended to echo those who supported option two but saw option 3 as a compromise that helped everyone.

"Option 3 provides for safer parking for office workers and
bike lanes in both directions."

Both the Alliance for a Better District 6 and SOMA Planning Council received presentations and were receptive to the proposed changes.

Please see attached raw comments from neighbors, businesses, bicyclists and civic groups

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